

**KABA
MAS**

Kaba Mas

X0 Series

X-10/CDX-10

Type 1F High Security Electronic Locks

FF-L-2740B/FF-L-2890C

X-10 features a Backlit LCD Display!



Poorly lit areas make it difficult to see a lock's visual control, and temporary lighting is a potential security issue. The X-10 now has the solution - simply turn the dial and the X-10 LCD screen illuminates. The X-10 was originally designed with the backlit feature in mind. Approved by the GSA after its first test submittal, the backlit feature is standard on all X-10s. Buy with confidence - all X-10 locks come with a two year warranty!

X-10: The GSA Approved Lock for FF-L-2740, Revision B, Style 1 Applications

Secure Tradition

The Kaba Mas X-O series is the trusted choice for securing the US Government's most sensitive material. The X-O series was first introduced in 1992 as the only lock to meet the strict requirements of Federal Specification FF-L-2740. This specification is the US Government's highest security standard for electro-mechanical locks. The X-10 represents the latest edition to this secure tradition. The X-10 is the GSA (General Services Administration) approved lock for FF-L-2740, latest revision B, Style 1 applications. The X-10 is approved by GSA for use on GSA approved filing cabinets, containers, and vault doors requiring an FF-L-2740 lock.

Why the X-10?

The X-10 was designed and developed as a direct result of the latest revision to federal specification FF-L-2740, now Revision B. This revision calls for two distinctly different lock styles. Be aware that the characteristics and operating features of a "Style 1" and "Style 2" lock are not equal! The X-10 is the only self-contained lock and now, with the backlit LCD display, clearly represents the best overall value. The X-10 is the lock awarded the distinction of being approved for Style 1 Applications.

User Friendly Features

The X-10 was designed with similar features and functions of its predecessor, the X-09. This minimizes the need for user training. The X-10 maintains the already familiar product operating features. The X-10 uses the same self-powered technology - simply rotate the dial to power-up the lock. The proprietary Kaba Mas self powered feature eliminates the concern of an unexpected failure due to battery life. The X-10 retains the same three security modes, along with a full complement of audit features.

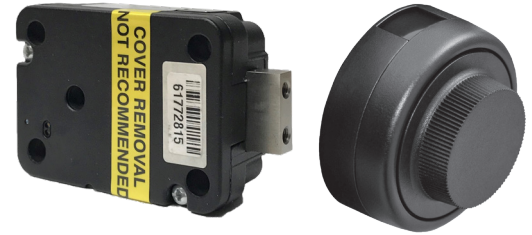
What's new?

The following chart lists the enhanced features of the X-10 versus its predecessor the X-09:

Feature	X-09	X-10	Comments
Backlit Display	N/A	Standard	Ease of Use
Lock Case	Field Assembly	Through Case Mounting	Ease of Installation, Sealed Case
Serial Number	Six-Digit	Eight-Digit	X-O Series, 1 Million Sold
Lock Motor	Stepper Motor	DC Motor	New Lock Design
Lock Cable Orientation	3 Hrs. Behind Bolt	Opposite of Bolt	New Lock Design
Lock Bolt Options	Flush & Extended - 4 Options	One Bolt Flush - Tapped	Enhanced Design, Fewer Parts
Product Identification "Dial Ring"	Factory Location, Month & Year Made	Product ID, Location, Month & Year Made	Product Differentiation
ID Stamp Location	9:00	8:00	Product Differentiation

The X-10 has been designed to enhance user friendly features, while improving security. For example, the lock case incorporates a through case mounting feature to improve ease of installation while protecting the lock's internal electronics and mechanisms. The lock case has a security seal which provides a visible indication the lock has been accessed.

X-10 Specifications



HARDWARE SPECIFICATIONS

- Power: Internal, self-powered by Rotational electromechanical PowerStar™ technology.

COMBINATIONS – 3 MODES:

- Single: 1 million combinations
- Dual: 500 billion combinations
- Supervisor/Subordinate: 2 million combinations
- Direct Dial: No need to clear before entering combination. Once you stop turning the dial, the power will shut down after 40 seconds.
- Memory: Non-volatile
- LCD (Backlit): Limited View Backlit Liquid Crystal Display with visual controls makes dialing easy and exact.
- Combination Changes: (LCD indicator in change key mode.) Combination changed with correct combination or serial number.
- Random Number View: True Scramble
- Daylocking: No
- Back Dialing: No
- Lock Reset: Automatic when bolt is thrown or 40 seconds after turning has stopped.
- Manipulation: Fail secure against high-voltage attack, robot attack, X-ray methods, magnetic, vibration, and R/F.
- Audit: The X-10 records all openings, and the record is non-resettable. The X-10 records unsuccessful attempts after 3 incorrect combination attempts and resets after a correct opening.
- Wrong Try Penalty: 10-14 errors results in a 3 minute time out. 15 errors or greater results in a 4 minute time out. Both error count and penalty time resets with valid combination.

ENVIRONMENTAL PERFORMANCE (Per FF-L-2740B)

- Temperature: Tested -10°F to 155°F Operational Range.
- Salt Spray: Operational After 72 hours of continuous exposure (per UL 768 Salt Spray Conversion Test).
- Cycle Test: Meets or exceeds FF-L-2740B specifications.
- Humidity: Operational after 10 days of 140°F @ 98% humidity (Operational after 10 days testing per MIL-STD-810E, Method 507.3, Procedure III, Temperature Cycling 86°F to 140°F @ 98% RH)
- Stress: Operational after 7 days in a stress chamber @ 194°F (per UL 768 Aging Stress Distortion Test).
- Vibration: MIL-STD-810
- Shock: MIL-STD-901
- Electrical Discharge: 250KV on Dial
- Electromagnetic Pulse: Meets FF-L-2740B specification for simulation of high altitude nuclear blast.
- Case & Bolt Strength: 600 pounds in two directions.

National Stock Numbers (NSN)

	X-10	CDX-10
Defense Logistics Agency (DLA)	5340-01-625-9551	5340-01-626-0087
General Services Agency (GSA)	5340-01-613-2078	N/A



IMPORTANT NOTE: Department of Defense and Agencies - Inquiries please contact:

Naval Facilities Engineering and Expeditionary Warfare Center, Physical Security Technology Division, DoD Lock Program, 1100 23RD Avenue, Port Hueneme, CA 93043-4370. Phone: (805) 982-1212 | <https://portal.navfac.navy.mil/go/locks>

CDX-10 Specifications



CDX-10 High Security Lock - Pedestrian Door Deadbolts

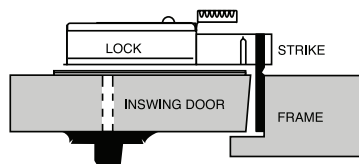
The Kaba Mas CDX-10 consists of an X-10 high security style 1 lock, Federal Specification FF-L-2740B, mounted on a deadbolt base plate. The base plate is surface-mounted to the inside face of the door. The deadbolt base plate has two essential features:

First, it provides a means of latching the bolt in the retracted position. This prevents the bolt from being inadvertently extended.

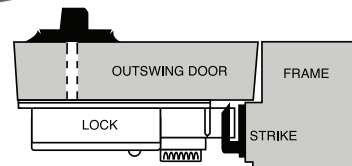
Second, turning the knob on the base plate will retract the bolt to allow egress.

The CDX-10 has been approved by the General Services Administration (GSA) meeting the requirements of Federal Specification FF-L-2890C, Type VI.

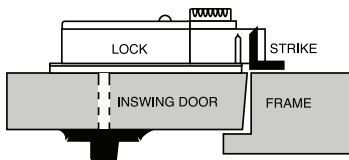
Strikes



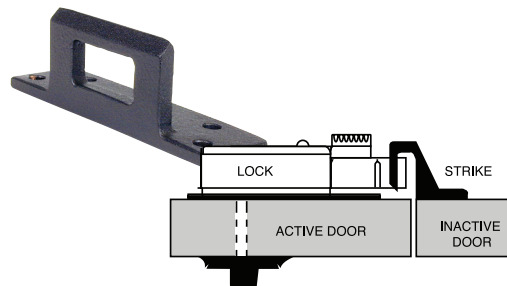
Type 1



Type 2



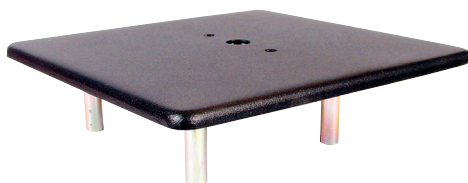
Type 3



Type 9



Dial Ring Mounting Plate



Non Drill-Resistant: Class N

For a complete list of CDX-10 options, part numbers and accessories, please refer to our List Price Book

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