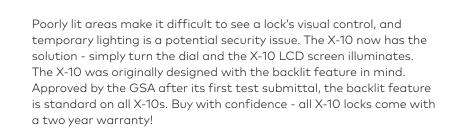


Kaba Mas X0 Series X-10/CDX-10/ DKX-10/DKXL-10

> Type 1F High Security Electronic Locks FF-L-2740B/ FF-L-2890C

# X-10 features a Backlit LCD Display!



Kaba Mas

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# 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 the GSA for use on approved Class 5 and 6 filing cabinets and Class 5 Security

vault doors.

## 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-0 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<sup>™</sup> 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.
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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



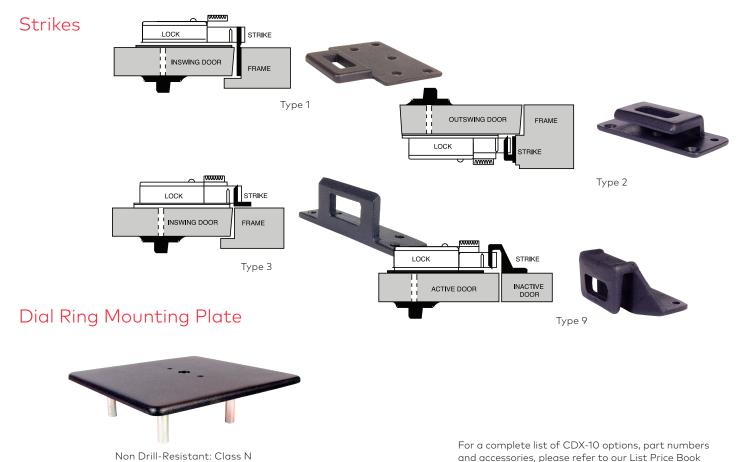
# CDX-10 High Security Lock - Pedestrian Door Deadbolts

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



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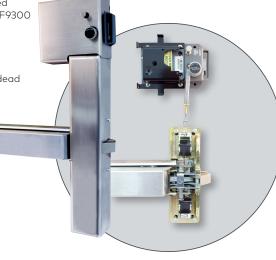
# DKX-10 High Security Pedestrian Exit Device



Integrated system includes GSA approved CDX-10 and a 3 hour fire-rated DORMA F9300 Panic Device

Electronic access control - Type IV

Simultaneous retraction of the CDX-10 dead bolt and exit device latch



## Overview

Kaba Mas has been a trusted partner to the United States Government since the X-0 Series was first introduced in 1992.

Kaba Mas High Security combination locks used on GSA approved security containers and CDX series pedestrian door locks used on doors to secure rooms and Secure Compartmented Information Facilities (SCIFs) have been preferred by U.S. Government agencies and Government contractors.

The Kaba Mas DKX-10 was developed to meet changes to Federal Specification FF-L-2890C. These changes added life-safety requirements to locking devices used to protect secure areas occupied by Government/Cleared Contractor personnel.

The General Services Administration (GSA) approved the Kaba Mas Type IV DKX-10, which is comprised of a Kaba Mas CDX-10 attached – through linkage – to a Dorma Grade 1, fire-rated rim exit device. The linkage ensures simultaneous retraction of both the exit device latch and the CDX-10 primary lock bolt. The combination of two proven products ensures compliance with codes for Security, Fire, and Life Safety and requirements of the American with Disabilities Act (ADA).

The DKX-10 Type IV includes integrated electrified trim that allows through-the-door wiring for electronic access control and a request to exit switch.

# Specifications/Standards/Regulations

## Federal

Fully compliant with, and GSA approved under Federal Specification FF-L-2890C, Type IV

## Life Safety

Meets/Compliant with:

- ANSI/BHMA A156.2, A156.3, & A156.36
- ADA /UFAS compliant ANSI/BHMA A156.2, A156.3, and A156.36
- ADA/UFAS compliant with access control interface ANSI/ BHMA A156.2, A156.3, & A156.36
- ANSI/BHMA A117.1
- ANSI/UL 10C Positive Pressure Fire Tests of Door Assemblies
- ANSI/UL 10B, Fire Tests of Door Assemblies
- NFPA 252, Standard Methods of Fire Tests of Door Assemblies (National Fire Codes, vol.66)

## Security

The Kaba Mas X-10 High Security Combination Lock used with the DKX-10 product line meets/exceeds performance requirements specified in Federal Specification FF-L-2740B for protection of Classified and National Security Information (NSI).

## Features

- The DKX-10 combines two Industry/Government proven products
- Straight forward installation and operation
- All Black dial and dial ring mounting plate
- X-10 back-lit LCD to assist in low light opening conditions
- The DKX-10 is designed to accept all GSA approved FF-L-2740B combination locks
- Easy upgrade for existing CDX devices. Refer to installation instructions at www.kabamas.com.

# DKXL-10 High Security Pedestrian Door Lock



Integrated system includes GSA approved CDX-10 and BEST 9K cylindrical lock

Electronic access control - Type II

Simultaneous retraction of the CDX-10 deadbolt and latchbolt



## Overview

The Kaba Mas DKXL-10 was developed to meet changes to Federal Specification FF-L-2890C. These changes added life-safety requirements to locking devices used to protect secure areas occupied by Government/Cleared Contractor personnel.

The General Services Administration (GSA) has approved the Type II DKXL-10, which is comprised of a CDX-10, attached – through linkage – to a BEST Grade 1, heavy duty cylindrical lock. The linkage ensures simultaneous retraction of both the secondary cylindrical lock latch bolt and the CDX-10 primary lock bolt. The combination of two proven products ensures compliance with codes for security, fire, and life safety and requirements of the American with Disabilities Act (ADA). The DKXL-10 is for use on both inswing and outswing doors.

The DKXL-10 Type II includes integrated electrified trim that allows through-the-door wiring for electronic access control and a request to exit switch.

# Specifications/Standards/Regulations

## Federal

Fully compliant with, and GSA approved under Federal Specification FF-L-2890C, Type II

## Life Safety

Meets/Compliant with:

- ANSI/BHMA A156.2, Series 4000, Grade 1
- UFAS, ADA, IBC, NFPA Code 80/101 compliant
- ANSI/BHMA A117.1

## Security

The Kaba Mas X-10 High Security Combination Lock used with the DKXL-10 product line meets/exceeds performance requirements of Federal Specification FF-L-2740B for protection of Classified and National Security Information (NSI).

#### Features

- Combines two time-tested, industry/Government proven products - Kaba Mas CDX-10 and BEST 9K
- Straight forward installation and operation
- 9K available with 2-3/4", 3-3/4" and 5" backsets
- All black dial and dial ring mounting plate
- X-10 back-lit LCD to assist in low light opening conditions
- The DKX-10 is designed to accept all GSA approved FF-L-2740B combination locks
- 9K available with either small format interchangeable core (SFIC) or large format removeable core configurations
- Easy upgrade for existing CDX devices. Refer to installation instructions at www.kabamas.com.

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kabamas.com