

# LX Series Lever Operated Openings



The LX Series exemplifies Syntégra's "deeper integration" attitudes and goals. The central lock case accepts handles and keyed cylinders from either and/or both sides. The lock case is configurable with the same popular functions offered in conventional locksets, but we can also do much more. The lever handles are protected by a break-away clutch allowing these systems to be used in the most abusive and demanding applications. Syntégra door systems do not use bulky escutcheons, roses, or edge plates to hide door preparations and mechanisms. Only the vital elements that are needed for operation are exposed, and everything else is concealed and protected.

Imagine being able to operate and secure each leaf of a pair of doors independently without the need for coordinators, astragals, and automatic flushbolts. Pairs and single doors also benefit in concealing the side latch and strike from view and tampering by latching at the top of the door. With electrical functions such as electrified lever (ELS) and electrified latch retraction (ML), the LX Series will interface with virtually any access control and door automation system.

## Typical Installations

Single and pairs found in the following applications:

- Areas of Refuge – Stairwell, Elevator Lobby, Elevator Cab
- Office single and pairs
- Main entrances
- Surgical suites

# LX Series Functions

## The Syntégra Edge™

### Tested Durability

- Solid cast or forged lever handles
  - Break-away clutch to prevent damage from abuse
  - Exceeds ANSI/BHMA standards
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### Enhanced Security

- Patent-pending friction-limiting latchbolt with 7/8" throw
  - Available in top latching or top and bottom latching
  - Break-away clutch protects from forced entry
  - Protected Latches and operating mechanisms - Concealed within the steel door and sheltered from attack, abuse, and tampering
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### Versatility

- Extensive list of functions to work with most openings and applications
- Access control ready with electrified lever, latch retraction, and RX options
- Electrical options available in kit-form allowing for future upgrades

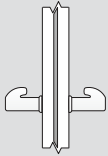
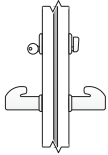
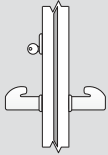
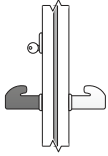
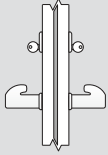
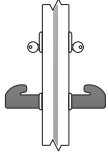
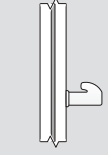
### Uncompromised Safety

- ITS listed for fire (UL10C) for single-point top latching or top and bottom latching
  - Top latching instead of side edge latchbolt and strike for singles and pairs prevents catching on clothing or equipment
  - Optional Antimicrobial coatings available for healthcare, education and other germ sensitive environments
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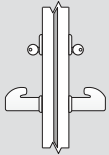
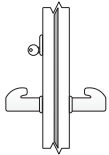
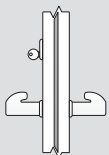
### Unequaled Aesthetics

- Escutcheon-free levers available in the most popular styles and finishes
- Optional integrated top strike prep without the need for a surface mounted auxiliary plate
- Projection type latchbolt minimizes the top strike view and minimizes the top door "notch" required by others
- No floor strikes required - Fire ratings without the need for bottom latchbolts

# LX Series Functions

Equivalent ANSI Function No.	DESCRIPTION Latch(es) operated by	OUTSIDE LEVER		INSIDE LEVER Operation
		Locked by	Unlocked by	
<b>F01 – Passage</b> 	<ul style="list-style-type: none"> <li>Rotating inside or outside lever</li> </ul>	<ul style="list-style-type: none"> <li>Cannot be locked</li> </ul>	<ul style="list-style-type: none"> <li>Always unlocked</li> </ul>	Always free egress
<b>F04 – Entry</b> 	<ul style="list-style-type: none"> <li>Rotating Inside lever, or</li> <li>Rotating outside lever only when unlocked by key or turn lever, or</li> <li>Turning key in outside cylinder</li> </ul>	<ul style="list-style-type: none"> <li>Turning inside turn lever, or</li> <li>Turning key in outside cylinder</li> </ul>	<ul style="list-style-type: none"> <li>Turning inside turn lever, or</li> <li>Turning key in outside cylinder</li> </ul>	Always free egress
<b>F05 – Classroom</b> 	<ul style="list-style-type: none"> <li>Rotating Inside lever, or</li> <li>Rotating outside lever only when unlocked by key, or</li> <li>Turning key in outside cylinder</li> </ul>	<ul style="list-style-type: none"> <li>Turning key in outside cylinder</li> </ul>	<ul style="list-style-type: none"> <li>Turning key in outside cylinder</li> </ul>	Always free egress
<b>F07 – Storeroom</b> 	<ul style="list-style-type: none"> <li>Rotating Inside lever, or</li> <li>Turning key in outside cylinder</li> </ul>	<ul style="list-style-type: none"> <li>Always locked</li> </ul>	<ul style="list-style-type: none"> <li>Cannot be unlocked</li> </ul>	Always free egress
<b>F09 – Apartment, Exit or Public Entrance</b> 	<ul style="list-style-type: none"> <li>Rotating Inside lever, or</li> <li>Rotating outside lever only when unlocked by key inside</li> <li>Turning key in outside cylinder only</li> </ul>	<ul style="list-style-type: none"> <li>Turning key in inside cylinder</li> </ul>	<ul style="list-style-type: none"> <li>Turning key in inside cylinder</li> </ul>	Always free egress
<b>F30 – Asylum or Institutional</b> 	<ul style="list-style-type: none"> <li>Turning key in inside or outside cylinder, fixed levers or no levers</li> </ul>	<ul style="list-style-type: none"> <li>Always locked</li> </ul>	<ul style="list-style-type: none"> <li>Cannot be unlocked</li> </ul>	Always fixed
<b>F31 – Exit or Communicating</b> 	<ul style="list-style-type: none"> <li>Rotating inside lever. Outside blank</li> </ul>	N/A	N/A	Always free egress

# LX Series Functions (cont.)

Equivalent ANSI Function No.	DESCRIPTION Latch(es) operated by	OUTSIDE LEVER		INSIDE LEVER Operation
		Locked by	Unlocked by	
<b>F32 – Intruder Latch Bolt Lock</b> 	<ul style="list-style-type: none"> <li>Rotating Inside lever, or</li> <li>Rotating outside lever only when unlocked by key, or</li> <li>Turning key in outside cylinder</li> </ul>	<ul style="list-style-type: none"> <li>Turning key in inside or outside cylinder</li> </ul>	<ul style="list-style-type: none"> <li>Turning key in inside or outside cylinder</li> </ul>	Always free egress
<b>Electrified Classroom – Fail Secure/Fail Safe</b> 	<ul style="list-style-type: none"> <li>Rotating Inside lever, or</li> <li>Rotating outside lever only when unlocked by key, or switched power</li> <li>Turning key in outside cylinder</li> </ul>	<ul style="list-style-type: none"> <li>Removing switched power</li> </ul>	<ul style="list-style-type: none"> <li>Turning key in outside cylinder or switched power allows outside lever to rotate</li> </ul>	Always free egress
<b>Hold-Open Electrified Entrance – Fail Secure</b> 	<ul style="list-style-type: none"> <li>With power is applied:</li> <li>Rotating Inside or outside lever holds latch(es) retracted until power is cut.</li> <li>Rotating outside lever only when unlocked by key</li> <li>Turning key in outside cylinder</li> </ul>	<ul style="list-style-type: none"> <li>Removing switched power</li> </ul>	<ul style="list-style-type: none"> <li>Turning key in outside cylinder</li> </ul>	Always free egress

All functions are factory configured. In most cases, these functions can be changed as required in the field. Consult factory for instructions.

\* Equivalent ANSI/BHMA A156.10 functions used for reference

## Lever Options



01 - Square Lever



02 - Tubular Lever



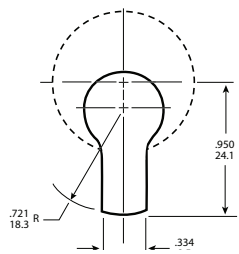
03 - Curved Lever

## Hardware Finish Options



- 613E Dark Bronze
- 605E Polished Brass
- 606E Satin Brass
- 629 Polished Stainless Steel
- 630 Satin Stainless Steel

# LX Series Hardware Specifications

<b>Device Functions</b>	Configured from the factory during the assembly of the door systems. See Function Chart for capabilities.
<b>Fire Ratings</b>	Listed for positive pressure fire tests (UL10C) with single-point top latching or top and bottom latching.
<b>Lever Centerline</b>	38-1/2" (978 mm) from finished structural floor (not including floor covering).
<b>Lever Materials</b>	Stainless Steel. Finished to match customer specifications.
<b>Lever Projections</b>	01 – Square = 2-5/32" 02 – Tubular = 2-9/16" 03 – Curved = 2-3/8"
<b>Strikes</b>	Optional integrated top strike included with Syntégra KD and welded frames. Surface applied retrofit strike available (P/N TSK-1 Kit). Bottom strike 1/2" diameter hole threshold or surface strike (P/N BSK-1 Kit).
<b>Electrical Options</b>	RX – Request to Exit. Provides a switch closure when the lever is actuated. RX2 – Same as above with two independent SPST switches.  ML - Motorized latch retraction quietly and efficiently retracts the latch(es) and pushbar when energized. Configured for fail-secure to comply to fire ratings.  ELS - Electrified lever. Allows exterior lever to rotate (or become rigid in fail-safe mode) to retract latch(es) when energized. Fail-Secure or Fail-Safe.
<b>Latchbolts</b>	Top latching only standard with – 7/8" (22.2 mm) throw. Projection type Friction limiting-design with deadlatching feature. Bottom – Massive Stainless Steel 7/8" throw bolt with conical tip
<b>Optional Keyed Cylinder</b>	Standard diameter Mortise Cylinder with "standard" cam. Can accept 1" cylinder length or greater. A 1" cylinder length does not require a collar. Anything above this cylinder length will require a spacer collar equal to the dimension in excess of 1". (Example 1-1/8" cylinder length requires a 1/8" collar).  
<b>Back-to-back Cylinders</b>	Requires a 1/4" collar for a 1" cylinder length. For longer cylinders, add the dimension in excess of the 1" cylinder length to the collar thickness. (Example 1-1/4" cylinder length requires a 1/2" collar).