Product Catalog

SARGENT®

ASSA ABLOY

7900 Series
Mortise Lock

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Specifications

7900 Mortise Lock

SARGENT
ASSA ABLOY

Certification Compliance

ANSI/BHMA	Certified to ANSI/BHMA A156.13 Series 1000 Operational Grade 1 **BHMA CERTIFIED**
ADA	Meets A117.1 Accessibility Code. Meets BOMA International 4.13.8 Complies with Americans with Disabilities Act; Consult local authorities
UL	UL and cUL Listed to US and Canadian safety standards for A label (3 hour fire door) and lesser class doors, stamped letter F and UL symbol on armored front indicate listing
Positive Pressure	Meets ANSI/UL 10C, Positive Pressure Fire Test of Door Assemblies
California Lever Code	California State Reference Code (Formerly Title 19, California State Fire Marshal Standard) All levers with returns comply; levers return to within 1/2" (13mm) of door face

Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Sargent Manufacturing Company makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.

MicroShield®

ASSA ABLOY Group companies offer MicroShield®, an anti-microbial coating for door hardware. MicroShield uses proven silver ion-based technology from Agion®, a leading provider of antimicrobial solutions, to stem the spread of bacteria and other microbes.

MicroShield® is a trademark of ASSA ABLOY Access and Egress Hardware Group, Inc.

agion *Nature's antimicrobial* — The Agion antimicrobial is not intended as a substitute for good hygiene. Coated products must still be cleaned to ensure the surfaces will be free of destructive microbes. ASSA ABLOY makes no representations or warranties, express or implied, as to the efficacy of the Agion antimicrobial. A copy of the Agion warranty is available upon request. Agion is a registered trademark of Agion Technologies, Inc., Wakefield, MA, USA.

MicroShield® Coating

- Revolutionary finish coating available on all SARGENT product lines, utilizes a silver-based antimicrobial compound from Agion Technologies

- As an integral part of the finish coating, MicroShield lasts for the life of the hardware

- MicroShield coating permanently suppresses the growth of bacteria, algae, fungus, mold and mildew. It is effective against a broad spectrum of bacteria.

- Non-toxic and completely safe. The Agion antimicrobial compound is EPA and NSF approved and FDA listed for use in medical and food preparation equipment.

- Applications: Anywhere there is need for a clean environment (hospitals, laboratories, schools, medical centers, daycare, food processing etc.)

On The Cover

- 7943 x OBL x 26D

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Features

7900 Mortise Lock

The SARGENT 7900 Series Mortise Locks provide a quality Grade 1 lock ideal for schools, apartment housing and commercial buildings.

Wrought outside front plate is self adjusting for door bevels from flat to 1/8" (3mm) in 2" (51mm)

Steel deadbolt assembly with 13 gauge hardened insert, 1" (25mm) projection

3/4" (19mm) projection stainless steel one-piece anti-friction latchbolt, reversible without opening case

Non-handed stainless steel auxiliary deadlatch

All trim designs through-bolted

7943 x OBL x 26D Shown

6-pin solid brass cylinder standard; multiple keying systems available

Solid brass, bronze or stainless steel levers. ADA compliant. Full latch retraction at 30° for ease of operation

Features

Durability
- Certified to ANSI/BHMA A156.13, Series 1000, Operational Grade 1 with all trim designs
- Heavy duty spring provides long life and reduces lever sag
- 3/4" Projection stainless steel latchbolt. One piece construction
- Steel deadbolt assembly with 13 gauge hardened steel insert, 1" (25mm) projection
- 5 year limited warranty, 2 year limited warranty on electrified locks. Limited to replacement of lock components

Flexibility
- Lock is easily re-handed by rotating the locking piece. Latchbolt is changed by removing the outside front and rotating the latchbolt 180°
- 16 Standard architectural grade finishes, including US14 Polished Nickel & US15 Satin Nickel
- 21 functions, including 4 electrical functions
- Available for door thicknesses 1-3/8" (35mm), 1-3/4" (44mm), 2" (50mm) and 2-1/4" (57mm)
- UL Listed 10C for use on single fire doors up to 4' x 10' and double doors up to 8' x 8'

Innovations
- Latchbolt retracts with only 30° of lever rotation
- Internal lever spring offers a sleek appearance, simplifies installation and reduces external components
- Solenoid controlled locking mechanisms for remote convenience to lock and unlock the 7900 Series Mortise lock featuring ElectroLynx® quick connectors

Security
- Torx® and spanner screws available as an option
- Can be master keyed or grand masterkeyed. Construction key available

Specifications

Backset	2-3⁄4" (70mm) only
Case	Wrought steel, zinc dichromate plated. Thickness 7/64" (3mm) (.109")
Outside Front Plate	Wrought 8" (203mm) x 1-1/4" (31mm), self adjusting beveled
Auxiliary Deadlatch	Stainless steel, non-handed
Strike	Wrought; ANSI/BHMA Standard A156.115; curved lip, non-handed (strike box optional)
Keys	Two, nickel silver keys, LA is the standard keyway. (control key or emergency key must be ordered when required)
Cylinder	Brass, size #41 (1-1/8" standard)
Masterkeying	Can be masterkeyed or grand masterkeyed. Construction keying available
Door Prep	ANSI/BHMA A156.115 modified (see template 4589 for 7900 lockbody & trim template varies by design)

Note: Key systems are compatible with a majority of other SARGENT products

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Standard Lever, Knob, Rose and Escutcheon Designs

## 7900 Mortise Lock

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The 7900 lever, knob, rose and escutcheon designs are available in all 16 architectural hardware finishes.
- All levers meet ADA national code requirements
- Lever designs BJ, BL and BP have lever returns within 1/2" (13mm) of door face
- Levers BB, BL, BJ & BP are only available with the O rose and the LW1 & the WT escutcheons.
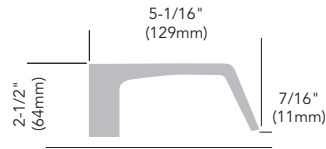- B knob is only available with the O rose and the KW1 & the WT escutcheons.

BB Lever Design
- BB Lever with O Rose
- Lever: Solid forged or cast
- Rose: Heavy wrought

4-15/16" (126mm)
2-11/16" (68mm)
1-13/16" (46mm)
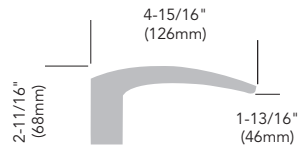
BL Lever Design
- BL Lever with O Rose
- Lever: Solid forged or cast
- Rose: Heavy wrought

5-1/16" (129mm)
2-1/2" (64mm)
7/16" (11mm)

BJ Lever Design
- BJ Lever with O Rose
- Lever: Solid forged or cast
- Rose: Heavy wrought

5-3/16" (132mm)
2-13/16" (72mm)
3/8" (10mm)
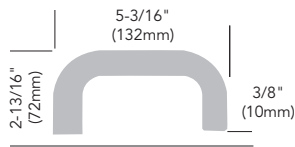
BP Lever Design
- BP Lever with O Rose
- Lever: Solid forged or cast
- Rose: Heavy wrought

5-3/16" (132mm)
2-7/16" (61mm)
7/16" (11mm)
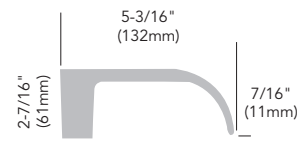
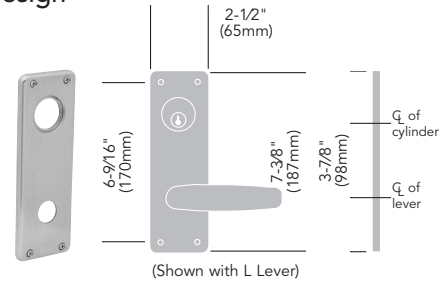**Note:** All lever height (+/- 1/16") measurements represent total distance from door face.

LW1/KW1 Escutcheon Design
- Escutcheon: LW1/KW1-Wrought
- (2) Exposed screws inside
- KW1 is used with the B Knob
- LW1 is used with lever designs

8" (203mm)
6-7/8" (175mm)
3-7/8" (98mm)
CL of cylinder
CL of lever
2" (51mm)

(Shown with L Lever)
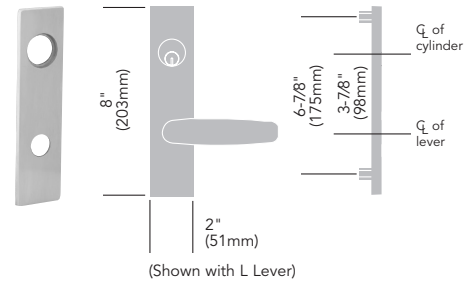
WT Escutcheon Design
- Escutcheon: WT-Heavy wrought
- Surface mounted both inside and outside
- (4) Exposed screws both inside and outside

2-1/2" (65mm)
6-9/16" (170mm)
7-3/8" (187mm)
3-7/8" (98mm)
CL of cylinder
CL of lever

(Shown with L Lever)

B Knob Design
- Knob: B heavy wrought
- 67- Option Knob both inside & outside
- 68- Option Lever outside/knob inside
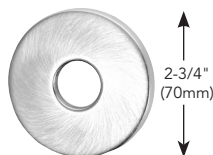- 69- Option Knob outside/lever inside
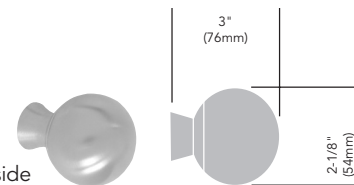
Note: Knob rotates in only one direction - toward hinge

3" (76mm)
2-1/8" (54mm)

Standard Rose

Note: The TO, CO, TR, CR, LN, E2, E3 and E4 roses are only available with the Studio Levers, the O rose is available for both standard and Studio

O Rose

2-3/4" (70mm)

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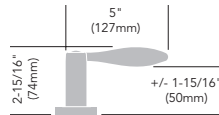# Standard Lever, Knob, Rose and Escutcheon Designs

7900 Mortise Lock

Coastal Series

- All levers meet ADA compliance for national codes
- Not available with CO and TO roses
- Levers are solid cast brass
- Finishes available – 03, 04, 09, 10, 10B, 10BE, 10BL, 14, 15, 20D, 26, 26D, BSP, WSP
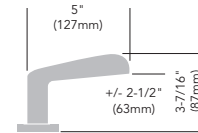- All lever height (+/- 1/16") measurements represent total distance from door face
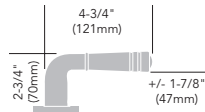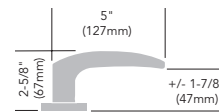
G - Gulfport™*

- Handed

5"
(127mm)

2-15/16"
(74mm)

+/- 1-15/16"
(50mm)

S - Sanibel™*

- Handed

5"
(127mm)

+/- 2-1/2"
(63mm)

3-7/16"
(87mm)

R - Rockport™*

4-3/4"
(121mm)

2-3/4"
(70mm)

+/- 1-7/8"
(47mm)

Y - Yarmouth™*

- Handed

5"
(127mm)

2-5/8"
(67mm)

+/- 1-7/8"
(47mm)
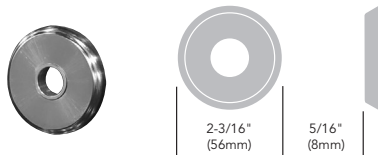
*Only available with CE, CR, TE, & TR roses

Coastal Series Roses & Escutcheons

TR Traditional Rose

- Dual radii edge

2-3/16"
(56mm)

5/16"
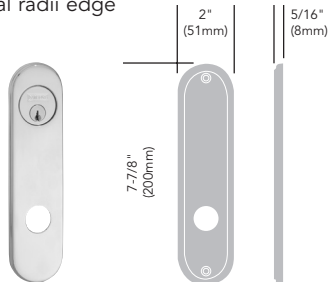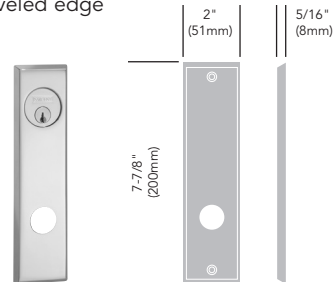(8mm)

CR Contemporary Rose

- Beveled edge

2-3/16"
(56mm)

5/16"
(8mm)
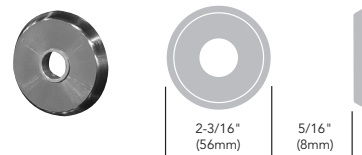
TE Traditional Escutcheon

- Dual radii edge

2"
(51mm)

5/16"
(8mm)

7-7/8"
(200mm)

CE Contemporary Escutcheon

- Beveled edge

2"
(51mm)

5/16"
(8mm)

7-7/8"
(200mm)

Studio Collection Levers

7900 Series Mortise Locks

Studio Collection trim is available in a broad array of designs and finishes. It allows for uniformity throughout a facility using the 8200, R8200 and 7900 Series Mortise Locks, Access Control Products, 80 Series Exit Devices, DL and RDL Series Tubular Locks.

All levers meet ADA compliance for national codes. Visit the online Decorative Hardware Product Selector at selector.sargentlock.com to mix and match styles and finishes.

Centro Series

MD

MJ

MP[2]

ND[1]

NJ[1]

Notting Hill Series

MA[2]

MO[2]

MQ[2]
(Handed)

MT[2]
(Handed)

MY[1,2]
(Handed)

MZ[1,2]
(Handed)

Aventura Series

MB

ME

MF

NF

MG

MI

MW[1]

[1] Lever returns within 1/2" (13mm) of door face
[2] Not available in 32D or 32 finish

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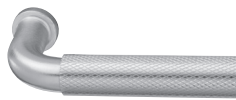
Odéon Series
(Handed Levers)

MN[4]

MH[4]

MS[4]

MU[4]

MV[4]

MX[1,4]

NS[1,4]

NU[1,4]

Gramercy Series[2]

RCM

RAL

REM

RAM

RAS

RAG

RGM

Berlin Series

H015

H016[1]

H017

H018

Wooster Square[3]

H001

H002[1]

H003

H004

H005[1]

H006[1]

Grant Park
(H008 is handed)

H007

H008

H009

H010

H011

[1] Lever returns within 1/2" (13mm) of door face
[2] Gramercy levers are customized. See page 10 for ordering information
[3] H003-H006 - Contain white or black polycarbonate inserts. Not available with MicroShield® antimicrobial coating.
[4] Not available in 32D or 32 finish

Roses

O Rose
2-3/4"
(70mm)

CO Rose
2-3/4"
(70mm)

TO Rose
2-3/4"
(70mm)

E2 Rose[1]
2-11/16"
(68mm)

E4 Rose[1]
3-1/4"
(83mm)
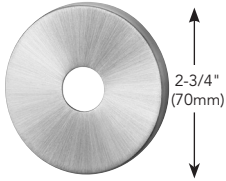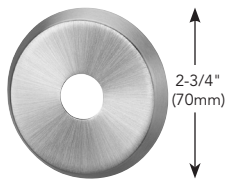
LN Rose
2-1/8"
(52mm)
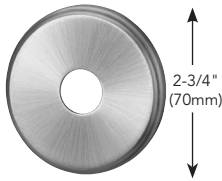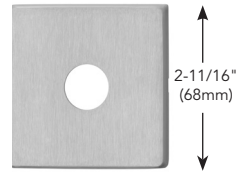
CR Rose
2-5/16"
(59mm)
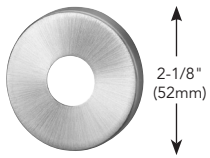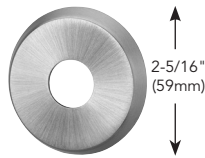
TR Rose
2-3/16"
(56mm)
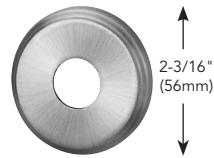
E3 Rose[1]
2-1/16"
(52mm)
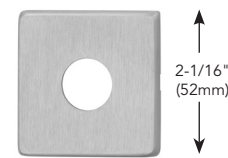
Thumbturns

Thumbturn backplate will match rose design chosen. See page 9 for more information.

T1 Turn
1-1/2"
(38mm)
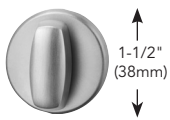
T2 Turn
1-1/2"
(38mm)
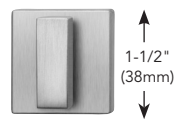
T3 Turn
1-1/2"
(38mm)
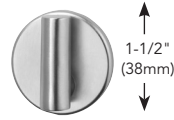
Escutcheons

LE1 Escutcheon
1-3/4"
(44mm)
7-7/8"
(200mm)

CE Escutcheon
2"
(51mm)
7-7/8"
(200mm)
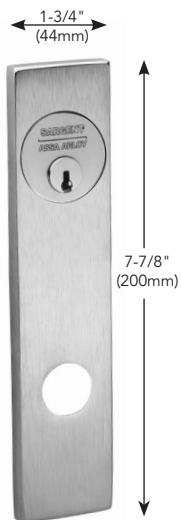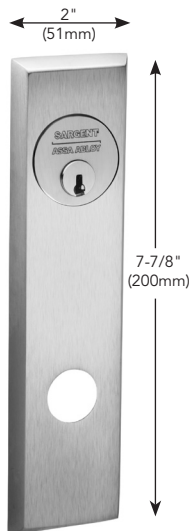
TE Escutcheon
2"
(51mm)
7-7/8"
(200mm)
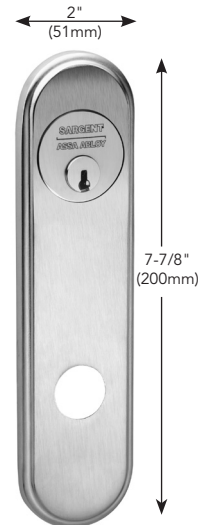
[1] KA square cylinder collar and 130KA square backplate automatically supplied with E2, E3 and E4 roses.

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Thumbturn Designs
7900 Series Mortise Lock

130W Round Backplate
(Shown with Standard Turn)

- Round backplate supplied standard with O and LN roses
- Standard turn automatically supplied with sectional trim for 7900 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-1/2" (38mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

130KT Traditional Backplate
(Shown with Standard Turn)

T1 Turn *T2 Turn* *T3 Turn*

- Dual radii edge backplate supplied standard with TO and TR roses
- Standard turn automatically supplied with sectional trim for 7900 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-3/4" (44mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

130LB Large Round Backplate
(Shown with Large ADA Turn)
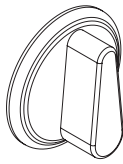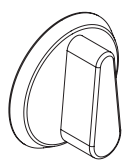
130LT *130LC*

- Available with 7900 with sectional trim
- 40% larger than standard thumbturn
- Specify LB as an option for ADA turn
- 2" (51mm) round brass, bronze, or stainless steel plate & turn
- 130LT - Traditional backplate, 130LC - Contemporary backplate
- Meets ADA Requirements

130KA Square Backplate
(Shown with Standard Turn)
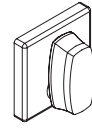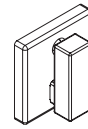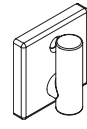
T1 Turn *T2 Turn* *T3 Turn*

- Square backplate supplied standard with E2, E3 and E4 roses
- Standard turn automatically supplied with sectional trim for 7900 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-1/2" (38mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

130KC Contemporary Backplate
(Shown with Standard Turn)
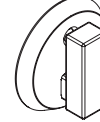
T1 Turn *T2 Turn* *T3 Turn*

- Beveled edge backplate supplied standard with CO and CR roses
- Standard turn automatically supplied with sectional trim for 7900 locks
- Specify T1, T2 or T3 as an option for decorative turns
- 1-3/4" (44mm) round brass, bronze or stainless steel plate
- Meets ADA Requirements

184W Emergency Release

- 1-1/2" (38mm) round brass, bronze or stainless steel plate
- Unlocks 65 & 66 functions by emergency key (14-0057), coin or flat blade screw driver

- Studio Collection Emergency Release
- 184KC Emergency Release Contemporary
- 184KT Emergency Release - Traditional

Emergency Key 14-0057
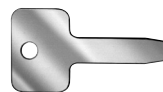
- Carbon steel
- For bathroom/privacy function only
- Must be ordered separately

How to Order Gramercy Series Levers

7900 Mortise Lock

Gramercy Series Levers
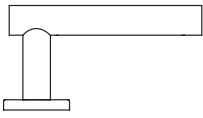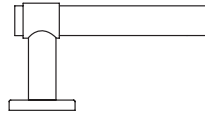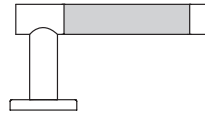
REM, RGM   RCM   RAG, RAL, RAM, RAS

Gramercy Finish Codes

ANSI/BHMA Finish	SARGENT Finish	Gramercy Code*	Description
630	32D	30	Satin Stainless Steel
629	32	29	Bright Stainless Steel
613E	10BE	3E	Dark Oxidized Satin Bronze, Equivalent
N/A	BSP	BS	Black Suede Powder Coat
N/A	WSP	WS	White Suede Powder Coat
N/A	N/A	BK	Black (Santoprene™ or leather insert)
N/A	N/A	BN	Brown (leather insert)

*Code used to specify Gramercy Series finishes only. Use available finishes list to specify desired finish when ordering.

Gramercy Lever Descriptions & Available Finishes

Lever Designation	Lever Description	Available Finishes (AS ORDERED)
RAG	Grooved Insert	3030, 2929, 2930, 3029, 3E3E, BSBS or WSWS
RAL	Leather Insert	30BK, 30BN, 29BK, 29BN, 3EBK3E, BSBKBS, WSBKWS, 3EBN3E, BSBNBS or WSBNWS
RAM	Satin Metal Insert	2930** only (SEE NOTATION)
RAS	Santoprene Insert	30BK, 29BK, 3E3E, BSBS or WSWS
RCM	Raised Band	2930, 2929, 3030, 3029, 3E3E, BSBS or WSWS
REM	Plain	2929, 3030, 3E3E, BSBS or WSWS
RGM	Two Grooves	2929, 3030, 3E3E, BSBS or WSWS

**Notes for two-tone finishes:
• 2930 Finish: grip of lever is 32D, balance of lever is 32. Escutcheon and lock finish will be 14.
• 3029 Finish: grip of lever is 32, balance of lever is 32D. Escutcheon and lock finish will be 15.

To order Gramercy Series levers with SARGENT products, see the examples below. When specifying finish, use the last two digits of the ANSI/BHMA standard finish code, i.e. use "29" for polished stainless, ANSI/BHMA finish 629.

How to Order 7900 Mortise Locks with Gramercy Series Levers

Options	Series	Function	Voltage	Rose/Escutcheon	Lever	Finish	Hand
Select from Pages 19-21	79	Select from Pages 11-13	Specified for Electrical Functions	Select from Page 8	Leather insert	Bright stainless steel with brown leather	RHR, RH, LHR, or LH
10-	79	71	12VDC	LN	RAL	29BN29	RH

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Single Cylinder without Deadbolt

04 Storeroom or Closet
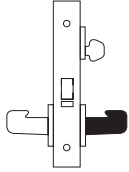
7904
- Key outside retracts latchbolt
- Lever/Knob outside rigid at all times
- Lever/Knob inside retracts latchbolt
- Auxiliary deadlatch
- ANSI/BHMA F07

37 Classroom
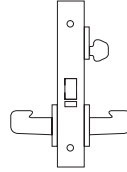
7937
- Key outside locks & unlocks lever/knob outside
- Key outside retracts latchbolt
- Lever/Knob inside always retracts latchbolt
- Auxiliary deadlatch
- ANSI F05

55 Office or Entry
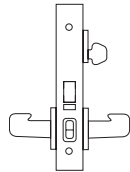
7955
- Key outside retracts latchbolt
- Lever/Knob inside retracts latchbolt
- Lever/Knob outside is locked & unlocked with toggle only
- Auxiliary deadlatch

Double Cylinder without Deadbolt

16 Apartment, Exit or Public Restroom
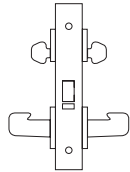
7916
- Key outside retracts latchbolt
- Key inside locks & unlocks lever/knob outside
- Lever/Knob inside always retracts latchbolt
- Auxiliary deadlatch
- Special cam Suffix -105 required for inside cylinder (Supplied Standard)
- ANSI/BHMA F09

38 Classroom Security Intruder Latchbolt
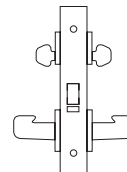
7938
- Key from either side locks & unlocks lever/knob outside
- Key from either side retracts latchbolt
- Lever/Knob inside always retracts latchbolt
- Auxiliary deadlatch
- ANSI/BHMA F32

If shaded, knob or lever rigid at all times

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11

Function Designations and Descriptions

7900 Mortise Lock

Single Cylinder with Deadbolt

24 Storeroom Door
7924
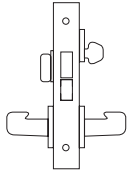
- Key outside or thumb turn inside retracts and projects deadbolt
- Lever/Knob either side retracts latchbolt
- Latchbolt and deadbolt are independent of each other
- ANSI/BHMA F21

25 Dormitory or Exit
7925

- Key outside or thumb turn inside retracts and projects deadbolt
- Lever/Knob from either side retracts latchbolt, when the deadbolt is in the retracted position
- Lever/Knob outside is locked, when the deadbolt is projected
- When deadbolt is projected, lever/knob inside retracts latchbolt and deadbolt simultaneously, unlocking outside lever/knob
- ANSI/BHMA F13

43 Apartment Corridor Door
7943
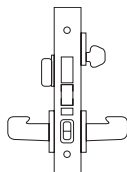
- Key outside or thumb turn inside retracts and projects deadbolt
- Key outside retracts both latchbolt and deadbolt, lever/knob outside remains locked
- Lever/Knob outside is locked by toggle or projecting deadbolt
- Lever/Knob outside is unlocked by toggle only
- Lever/Knob inside (when deadbolt is projected) retracts latchbolt and deadbolt simultaneously, and lever/knob outside remains locked
- Auxiliary deadlatch
- ANSI/BHMA F20

45 Dormitory or Exit
7945

- Key outside or thumb turn inside retracts and projects deadbolt
- Key outside retracts both latchbolt and deadbolt, lever/knob outside remains locked
- Lever/Knob outside is locked by toggle or projecting deadbolt
- Lever/Knob inside (when deadbolt is projected) retracts latchbolt and deadbolt simultaneously, and lever/knob outside remains locked
- ANSI/BHMA F12

50 Hotel Guest
7950

- Hotel Cylinder Required (50 Function Cylinder) with two types of Keys (Standard & Emergency)
- Standard Key outside retracts latchbolt only, will not retract or project deadbolt
- Emergency Key outside will retract latchbolt and deadbolt and also project deadbolt
- Thumb turn inside retracts and projects deadbolt
- Lever/Knob inside retracts both latchbolt and deadbolt simultaneously
- Lever/Knob outside is always rigid
- Auxiliary deadlatch
- Not available with certain key systems (see Option chart in this catalog for restrictions)
- ANSI/BHMA F15

Double Cylinder with Deadbolt

✦26 Store Door
7926
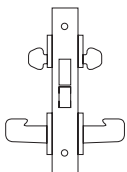
- Key from either side retracts and projects deadbolt
- Lever/Knob from either side retracts latchbolt
- Latchbolt and deadbolt are independent of each other
- ANSI/BHMA F14

✦ **CAUTION:** Not recommended for use on any door used for Life Safety egress

If shaded, knob or lever rigid at all times

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Non-Keyed

15 Passage or Closet

7915
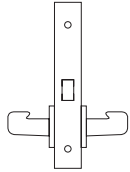
- Lever/Knob from either side retracts latchbolt at all times
- ANSI/BHMA F01

65 Privacy Bedroom or Bath

7965

- Lever/Knob outside retracts latchbolt except when locked by thumb turn inside
- Lever/Knob inside retracts latchbolt and unlocks outside lever/knob
- Emergency Release unlocks outside lever/knob with coin or flat
- Thumb turn inside, locks and unlocks outside lever
- Closing the door will unlock lever/knob outside
- ANSI/BHMA F22

66 Privacy Bedroom or Bath

7966

- Lever/Knob outside retracts latchbolt except when deadbolt is projected
- Lever/Knob inside retracts both latchbolt and deadbolt simultaneously, and unlocks outside lever/knob
- Emergency Release retracts and projects deadbolt by coin or flat blade screw driver
- Thumb turn retracts and projects deadbolt
- ANSI/BHMA F19

93 Single Trim Dummy

7993

- Lever/Knob on inside of door is always rigid
- Lever/Knob only inside used as door pull
- Through bolted

NOTE: Different door prep required, see template 4298

94 Double Trim Dummy

7994

- Lever/Knob on both sides are always rigid
- Lever/Knob only used as door pull
- Through bolted

Note: Different door prep required, see template 4298

95 Single Trim Dummy

7995
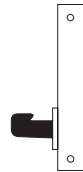
- Lever/Knob on one side only is always rigid
- Includes lock case and armor front
- Lever mounted on inside of the door.

✦CAUTION: Not recommended for use on any door used for Life Safety egress

If shaded, knob or lever rigid at all times

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SARGENT 7900 Electro-mechanical Mortise locks can be used for single openings, stand alone applications or can be readily integrated into sophisticated access control systems.

Applications: Security and restricted access areas in schools, computer rooms, offices, banks, equipment rooms, laboratories and hospitals. Also used with fire and alarm controls in buildings and stair tower doors.

Featuring EcoFlex®*

A SUSTAINABLE SOLUTION — GreenCircle CERTIFIED — CERTIFIED ENERGY SAVINGS®

- Reduces energy consumption up to 96%, as certified by GreenCircle
  – Lower operating costs
  – Assists with load reduction in optimizing energy performance credit in LEED
  – Reduces number of power supplies required
- Field configurable to fail-safe or fail-secure
- Operates from 12-24VDC, offering greater flexibility in system design

- Innovative actuator design provides superior reliability
  – Higher performance and reduced maintenance
  – Ability to have longer cable runs without negatively impacting lock function
  – Reduces risk of voltage drops and eliminates inductive kickback
  – Lower total cost of ownership
  Patent pending

Electrical Requirements:

Voltage: Operates from 12-24VDC Regulated. Full wave rectification installed inside the lockbody.

Current: .25A at 24VDC or .5A at 12VDC

Operating Temp.: Max. 151°F (66°C), Min –31°F (-35°C)

UL and CUL listed for use on Fire Doors

Note: Repeated operation at voltage exceeding +/- 10% is not recommended.

Note: Opening lockbody by non-authorized personnel voids UL label and lock warranty.

Warning:

- **Do not** connect locks with a circuit sharing an additional electromagnetic device as the lock may be damaged
- Transient voltage must be suppressed at the source or before connecting with the lock
- Varistor rated at 35 volts (peak) may be used for transient voltage protection

RX- Monitoring Mortise Locks

7900 Mortise Locks are available with internal switches for independently monitoring inside/outside lever rotation (RX- option).

- SPDT type C switches, rated 2A at 24VDC
- **RX- Request to Exit or Enter**
  – Two switches mounted internally in lockbody that provide independent monitoring of inside and outside lever rotation
  – Available in all functions w/non rigid levers
  – Not available with 1- option

Electromechanical Functions

70 Electrical Fail Safe
71 Electrical Fail Secure

7970
7971
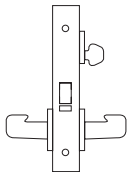
- 70 function - Fail Safe Power off
  – Unlocks outside lever
- 71 function - Fail Secure Power off
  – Locks outside lever
- Specify 12VDC or 24VDC
- Key outside retracts latchbolt
- Lever outside can only be locked with the solenoid
- Lever inside always retracts latchbolt
- Only available with lever trim
- Auxiliary deadlatch

✦72 Electrical Fail Safe
✦73 Electrical Fail Secure

7972
7973
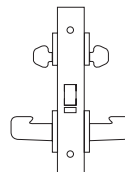
- 72 function - Fail Safe Power off
  – Unlocks both levers
- 73 function - Fail Secure Power off
  – Locks both levers
- Specify 12VDC or 24VDC
- Key either side retracts latchbolt
- Levers can only be locked with the solenoid
- Levers can not be locked independently
- Only available with lever trim
- Auxiliary deadlatch

✦**CAUTION:** Not recommended for use on any door used for Life Safety egress

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Curved Lip Strikes

- All locks are packed standard with a universal non-handed curved lip ANSI 4-7/8" (124mm) strike
- All strikes: Brass, bronze or stainless steel
- To order strikes separately, specify strike part number and finish. Strikes ordered separately are furnished with machine screws
- Strike Box is available separately as 77-1141 or WBS-
- For Strikes other than standard, specify part number when ordering with complete lock
- See chart for part number and lip lengths

Curved Lip Strike

Door Thickness	Part No.	Lip Length
Double Door	82-0229	7/8 " (23mm)
1-3/8" - 1-1/2" (35mm) (38mm)	82-0109	1-1/8 " (29mm)
1-5/8" - 1-3/4" (41mm) (44mm)	82-0110 (Std)	1-1/4 " (32mm)
1-7/8" - 2" (48mm) (51mm)	82-0111	1-3/8 " (35mm)
2-1/8" - 2-1/2" (54mm) (64mm)	82-0112	1-5/8 " (41mm)

Curved Lip Strike (Standard)

11/16" (17mm)

4-7/8" (124mm)

2-3/4" (70mm)

3/32" (2mm) Thick

4-1/8" (104.7mm)

1-1/4" (32mm) Lip Length
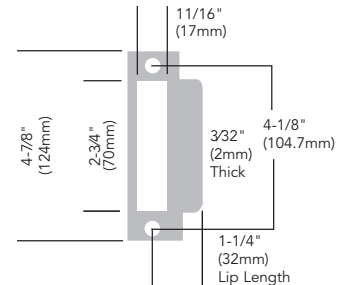
77-1141 Wrought Box Strike (WBS)

- Specify WBS- when ordering lock to receive Box Strike with lock
- If ordering separately, use part# 77-1141

Outside Front Plate

Standard Width 1-1/4" (32mm)	Functions
79-0009	15, 65
79-0010	04, 16, 37, 38
79-0011	24, 25, 26, 66
79-0012	50
79-0014	45
79-0015	43
79-0010	70, 71, 72, 73
79-0008	95
79-0013	55

Outside Front Plate

1-1/4" (32mm) or 1-1/16" (27mm)

Note: 1- option

8" (203mm)

6-1/2" (165.1mm)
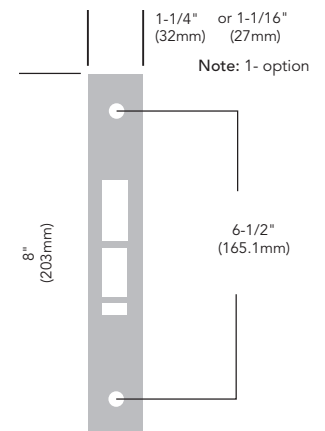
Cylinder Lengths (Dim X)

Cylinder No.	41	42	43	44	46	48	50	52	54	56
Dim X Length Under Cylinder Head	1-1/8" (29mm)	1-1/4" (32mm)	1-3/8" (35mm)	1-1/2" (38mm)	1-3/4" (44mm)	2" (51mm)	2-1/4" (57mm)	2-1/2" (64mm)	2-3/4" (70mm)	3" (76mm)

40 Series Type Cylinder

- Cylinder body: Solid brass
- Cap: Brass, bronze or stainless steel
- All functions use a standard cam, Except 50 function and the Inside Cylinder for 16 function locks.
  (see page 11-12 for more details)

1-5/16" (33mm)

15/32" (12mm)

1/8" (3mm)

Dim X
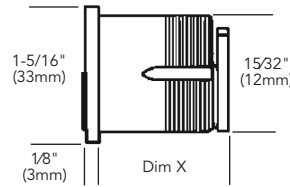
DG1, DG2, DG3 - Degree Series

- Utility patented, bump resistant and requires the use of a patented key
- All three locking mechanisms within the same system to be operated with just one key
- See Degree Key System Catalog for available options

11- Option XC Key System

- Patented system works with existing SARGENT keyway adding increased security
- 11- Option: XC- Standard Cylinder
- 11-63- Option: Large Format Interchangeable Core XC- cylinder
- 11-73- Option: Small Format Interchangeable Core with XC- feature

10- Option Signature Series

- The system offers the building owner full control over duplication of keys. Highly pick resistant cylinders
- 10-63- Option: Large Format Interchangeable Core Signature cylinder

21- Option Lost Ball Construction System

- The SARGENT construction keying system protects the building owner by providing temporary masterkeying during the construction period

Note: For complete cylinder information, see the appropriate Cylinder Catalog

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60- or 70- Option Plastic Construction Core

- For doors that do not require key locking during the construction period
- Operate with coin or flat screw driver
- For use with LFIC (60- Option) or SFIC (70- Option) core

73- Small Format Interchangeable Core

- Small Format Interchangeable Core
- SARGENT Interchangeable Core cylinders and MasterKey Systems are available for increased security through quick keying change. It is not necessary to remove a cylinder
- SARGENT 7300B Interchangeable Restricted Cores are available in SARGENT 4A and 4B keyways, as well as the following standard competitor keyways: A, B, C, D, E, F, G, H, J, K, L, M
- For disposable core, see 70- option
- 65-73- Option: 6-Pin Small Format Interchangeable Cores uncombined
- 65-73-7P- Option: 7-Pin Small Format Interchangeable Cores uncombined
- 70- Option: Small Format Interchangeable disposable core
- 72- Option: Small Format Interchangeable construction core
- 73- Option: 6-Pin Small Format Interchangeable core, SARGENT 4A, 4B keyways
- 73-7P- Option: 7-Pin Small Format Interchangeable core, SARGENT 4A, 4B keyways
- Control key used to remove core; Must request control key separately

63- Option Large Format Interchangeable (Removable) Core

- Allows immediate removal of the core. Virtually unlimited key changes
- For disposable core, see 60- option
- 10-63- Option: Large Format Interchangeable Core Signature cylinder
- 11-63- Option: Large Format Interchangeable Core XC- cylinder
- 64- Option: Large Format Interchangeable Core construction core
- Control key used to remove core; Must request control key separately

124 Series Mortise Cylinder Turn Lever

- Turn lever: Brass, bronze or aluminum
- Cap: Brass, bronze or stainless steel
- Must be ordered separately
- Used on doors where keyed cylinder is not needed

F1-82- and 82- Option KESO

- The system offers the building owner full control over duplication of keys
- Highly pick resistant cylinders
- Expanded levels of masterkeying
- F1-83- & 83: Option- Keso removable core
- 84- Option: Keso construction core cylinder

Note: For complete cylinder information, see the appropriate Cylinder Catalog

Cylinder Rosettes and Cams
7900 Mortise Lock

97 Rosette Cylinder Collar

- Standard for
- 1KB Cylinder collar is used for longer cylinders and various door conditions
- Brass, bronze or stainless steel
- Standard for cylinders ordered separately from hardware
- 1-11/16" diameter (43mm), 9/32" (7mm) projection, includes compression spring
- Finishes: 3, 4, 10, 10B, 10BE, 32, 32D, BSP, WSP

1 KB Rosette Cylinder Collar

- The KB series of cylinder rosettes will be used as required for various door conditions and cylinders (ex. 60- & 70-)
- Brass, bronze or stainless steel
- 1-1/2" (38mm) diameter, includes compression spring
- Projection from door:
  1KB-1 : 5/16" (8mm) - Standard
  1KB-2 : 7/16" (11mm)
  1KB-3 : 9/16" (14mm)

No. 90 Blocking Ring

- Used with 1KB rosettes as spacer when mortise cylinder projects from face of door
- Brass, bronze or stainless steel
- 1-3/8" (35mm) diameter; 1/16" (1.6mm) to 3/8" (9mm) projection in 1/16" (1.6mm) increments. Specify size when ordering.
- Finishes: 3, 4, 10, 10B, 10BE, 10BL, 20D, 26, 26D, 32, 32D, BSP, WSP

1KA Rosette Cylinder Collar

- Used with mortise cylinders
- Furnished standard with the E2, E3 and E4 roses
- Brass, bronze or stainless steel
- 1-1/2" (38mm) Square, includes compression spring
- Projection from door:
  1KA-1 5/16" (8mm) - Standard
  1KA-2 7/16" (11mm)
  1KA-3 9/16" (14mm)
  1KA-4 11/16" (16mm)
- Finishes: 3, 4, 10, 10B, 10BE, 10BL, 20D, 26, 26D, 32, 32D, BSP, WSP

Cylinder Cams For Mortise Locks

SARGENT Conventional Cylinders

- Standard

Std Cam
(13-0664) for all functions except for 50 and the Inside cam for 16 function locks

-105 Cam
(13-0665) for 16 Function Inside Cylinder

-115 Cam
(13-2045) 50 Function Hotel Cam, supplied with 50 function cylinders

SARGENT Removable Core Cylinders

- 6300 Cams are factory installed and are not removable
- 6300 Cams are not sold separately
- Specify required Cam as a suffix: 63-44-105 cam
- For Standard Cam: No Suffix is required

Std 6300 Cam
for all functions except for 50 and the Inside cam for 16 function locks

-105 Cam
for 6300 Series 16 Function Inside Cylinder

-115 Cam
for 6300 Series 50 Function Hotel Cam, supplied with 50 function cylinders

Note: For cylinders other than conventional and LFIC (removable core), see Cylinder catalogs for additional information

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Mechanical Options

Categories	How to Specify	Detailed Description
1-3/8" Doors	1-	1-1/16" (27mm) wide front for 1-3/8" (35mm) doors (Not available with RX- Option) (1- for 93 + 94 function is a special)
Thick Doors	31-	For doors 1-7/8" (48mm) to 2-1/4" (57mm) thick – see cylinder options for limitations on door thickness. When ordering the following information is required: Location of lock within the door, door thickness - IF PANELED - must specify panel thickness & panel location (inside or outside of the door) For doors thicker than 2-1/4" - consult factory
Security Fasteners	36-	6 Lobe head security screws (Torx® type). Screw chart on pg 18 (Not available with Studio Levers)
	37-	Spanner head security screw. Screw chart on pg 18 (Not available with Studio Levers)
Electrical Option	RX-	Request to exit. Monitors the activation of the inside and outside lever independently (not available with 1- or LB-)
Knob & Lever Combinations	67-	Knob outside x knob inside (Not available with 70, 71, 72, 73 or 95 functions, RX- Option or Studio Levers)
	68-	Lever outside x knob inside (Not available with RX- Option, 95 function or Studio Levers)
	69-	Lever inside x knob outside (Not available with RX- Option, 95 function or Studio Levers)
Tactile Warning Options	75-	Tactile Warning — Milled levers or knurled knobs. Inside trim only (Not available with Studio Levers)
	76-	Tactile Warning — Milled levers or knurled knobs. Outside trim only (Not available with Studio Levers)
	77-	Tactile Warning — Milled levers or knurled knobs. Inside & outside trim (Not available with Studio Levers)
	85-	Tactile Warning — Abrasive coating finish inside trim only
	86-	Tactile Warning — Abrasive coating finish outside trim only
	87-	Tactile Warning — Abrasive coating finish inside & outside trim
Thumbturns (See page 9)	LB-	ADA Extra large thumbturn; backplate matches rose design chosen
	T1	Decorative thumbturn; backplate matches rose design chosen
	T2	Decorative square thumbturn; backplate matches rose design chosen
	T3	Decorative cylinder thumbturn; backplate matches rose design chosen
Finish Protection	CPC-	Clear Powder Coat (Available for 32 & 32D Finishes)
	SG-	MicroShield® antimicrobial clear powder coat
Box Strike	WBS-	Wrought Box Strike

ADA and Handicap Warning

Lever Return to Door

- Available with BL, BJ & BP levers
- Lever returns within 1/2" (13mm) of door face or less
- Meets the strictest ADA code compliances.

NOTE: All lever height (+/- 1/16") measurements represent total distance from door face.

Tactile Handicapped Warning

- Knurled B knob available
- Knobs are NOT ADA compliant

Tactile Handicapped Warning

- Abrasive Coating: Options 85-, 86- & 87-
- Milled 1/16" Grooves: Options 75-, 76- & 77-
  BB, BJ, BL and BP Levers – grooved on backside surface of lever

Keys

- Large key bows available with SARGENT "C" keyways only
- Keys NOT ADA compliant Shown: Large Bow Key on left

Cylinder Options

Categories	How to Specify	Detailed Description
Degree Key System	DG1-	SARGENT Degree Key System Level 1 (Bump resistant with patented keys)
	DG1-21-*	Degree Level 1 Construction Master Keying
	DG1-60-*	Degree Level 1 Removable Disposable Construction Core
	DG1-63-	Degree Level 1 Removable Core
	DG1-64-	Degree Level 1 Removable Construction Keyed LFIC
	DG1-65-*	Degree Level 1 Unassembled/Uncombined Core
	DG1-78-*	Degree Level 1 Exposed Plug (For use with LE3/LE4 escutcheons only)
	DG2-*	SARGENT Degree Key System Level 2 (Geographically exclusive; bump and pick resistant)
	DG2-21-*	Degree Level 2 Construction Master Keying
	DG2-60-*	Degree Level 2 Removable Disposable Construction Core
	DG2-63-*	Degree Level 2 Removable Core
	DG2-64-*	Degree Level 2 Removable Construction Keyed LFIC
	DG2-65-*	Degree Level 2 Unassembled/Uncombined Core
	DG2-78-*	Degree Level 2 Exposed Plug (For use with LE3/LE4 escutcheons only)
	DG3-*	SARGENT Degree Key System Level 3 (Geographically exclusive;UL437 certified;bump and pick resistant)
	DG3-21-*	Degree Level 3 Construction Master Keying
	DG3-60-*	Degree Level 3 Removable Disposable Construction Core
	DG3-63-*	Degree Level 3 Removable Core
	DG3-64-*	Degree Level 3 Removable Construction Keyed LFIC
	DG3-78-*	Degree Level 3 Exposed Plug (For use with LE3/LE4 escutcheons only)
Signature Key System	10-*	SARGENT Signature Key System (Not Available with other Key Systems)
	10-21-*	SARGENT Signature Construction Key System (Lost Ball)
XC- Key System	11-*	XC Key System (Not Available with other Key Systems, unless specified)
Signature Large Format Interchangeable Core (Removable Core)	10-63-*	SARGENT Signature LFIC (Removable) Core Cylinder
XC- Large Format Interchangeable Core (Removable Core)	11-60-*	Lock to accept XC- Permanent LFIC (Removable core), disposable plastic core provided
	11-63-*	Lock provided with XC- LFIC (Removable core) cylinder - (Includes masterkeying, grand masterkeying)
	11-64-*	Lock provided with keyed construction core to accept XC- LFIC (Removable) Permanent core ordered separately
XC- Small Format Interchangeable Cores	11-70-7P-*	Lock to accept XC- SFIC (7-Pin) XC- Permanent Cores, plastic disposable core provided
	11-72-7P-*	Lock to accept XC- SFIC (7-Pin Keyed Construction Core provided) cylinder Permanent core ordered separately
	11-73-7P-*	Lock provided with XC- Small Format 7-Pin interchangeable core (Includes masterkeying, grand masterkeying)
	11-65-73-7P-*	Lock provided to accept XC- Uncombinated 7-Pin SFIC (Permanent) Core - (Packed Loose)
Construction Key Systems	21-*	SARGENT Lost Ball Construction Keying for Conventional, XC and Signature Series (N/A with 63- or 73-)
	22-*	SARGENT Construction Split Key System for Conventional Cylinders (Existing Systems Only) 2" (51mm) door thickness max. - centered (N/A with 10-, 11-, 63- or 73-)
Large Format Interchangeable Core (Removable Core)	60-	Lock to accept SARGENT Permanent LFIC (Removable core), disposable plastic core provided (Permanent cores ordered separately)
	63-	Lock provided with LFIC (Removable core) cylinder - (Includes masterkeying, grand masterkeying)
	64-	Lock provided with Keyed construction core to accept LFIC (Removable) permanent core (Ordered separately)
Small Format Interchangeable Cores	70-*	Lock to accept 6- or 7-Pin SFIC Permanent Cores, plastic disposable core provided
	72-*	Lock to accept 6- or 7-Pin SFIC (6-Pin Keyed Construction Core provided) Cylinder (Permanent Core Ordered Separately)
	73-*	Small Format 6-Pin Interchangeable Core SARGENT 4A, 4B keyway only (Request control key separately) (Includes masterkeying, grand masterkeying)
	65-73-*	Lock provided to accept Uncombinated 6-Pin SFIC (Permanent) Core - (Packed Loose for field keying)
	65-73-7P-*	Lock provided to accept Uncombinated 7-Pin SFIC (Permanent) Core - (Packed Loose for field keying)
	73-7P-*	Small Format 7-Pin Interchangeable Core SARGENT 4A, 4B keyway only (Not available with Studio Levers) (Includes masterkeying, grand masterkeying)

* Options not available with 50 function locks

Note: For V-10 Cylinders and information, contact ASSA

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Cylinder Options

Categories	How to Specify	Detailed Description
Keso & Keso F1	81-*	Lock provided with housings to accept Keso (83) & Keso F1 (F1-83-) removable cores. (Permanent Cores ordered separately)
	82-	Lock provided with SARGENT Keso Security Cylinder
	F1-82-	Lock provided with SARGENT Keso F1 Security Cylinder (Patented)
	83-*	Lock provided with SARGENT Keso Security Removable Core cylinder
	F1-83-*	Lock provided with SARGENT Keso F1 Security Removable Core cylinder (Patented)
	84-*	Lock provided with SARGENT Keso Construction Cores (Permanent Cores ordered separately)
Added Security	BR-	Bump Resistant Cylinder (Available with Conventional & Conventional XC Cylinders Only)
Less Cylinder	LC-	Less Cylinder - SARGENT supplies standard blocking rings for 1-1/8" Cylinders (For longer cylinders order collars / rings separately)
Schlage Keyways	SC-*	Schlage "C" Keyway Number 41 cylinder only, 0 bitted (2" (51mm) door thickness max. — centered)
	SE-*	Schlage "E" Keyway, Number 41 cylinder only, 0 bitted (2" (51mm) door thickness max. — centered)

* Options not available with 50 function locks

How to Order 7900 Series Mortise Locks

10-	79	71	12VDC	LN	MJ	15	RHR
Options*	Series	Function	Voltage	Roses/Escutcheons	Levers/Knobs	Finish	Hand
For all available options see Page 19-21	79 Mortise Lock	Pages 11-13 for Details	12VDC 24VDC — Voltage must be specified for 70, 71, 72 & 73 Functions	Standard Offering Page 4 — Studio Offering Page 8	Standards Levers & Knob Page 4 & 5, — Studio Levers Page 6 & 7	Page 21	RHR
							RH
							LHR
							LH

* Multiple options available

Hardware Finishes Available

7900 Standard Trim	Studio Collection	ANSI/BHMA	Description
03	03	605	Polished brass, clear coated
04	04	606	Satin brass, clear coated
09	09	611	Polished bronze, clear coat
10	10	612	Satin bronze, clear coated
10B	10B	613	Oxidized bronze, oil rubbed
10BE	10BE	613E	Dark oxidized satin bronze — equivalent
10BL	10BL	613L	Oxidized satin bronze, clear coat
14	14	618	Polished nickel, clear coat
15	15	619	Satin nickel, clear coat
20D	20D	624	Statuary dark bronze, clear coat
26	26	625	Polished chrome
26D	26D	626	Satin chrome
32	32	629	Polished stainless steel
32D	32D	630	Satin stainless steel
BSP	BSP	BSP	Black suede powder coat
WSP	WSP	WSP	White suede powder coat

Note: Split finishes available (Order: outside finish/inside finish)
If inside and outside trim designs differ, please specify (Order: outside/inside trim)

Packaging

7955 x OBB	approx. 5.8 lbs. (2.6kg)/box	6 boxes/case
7955 x LW1BB	approx. 6.5 lbs. (2.9kg)/box	6 boxes/case

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Handing Information and Security Screws
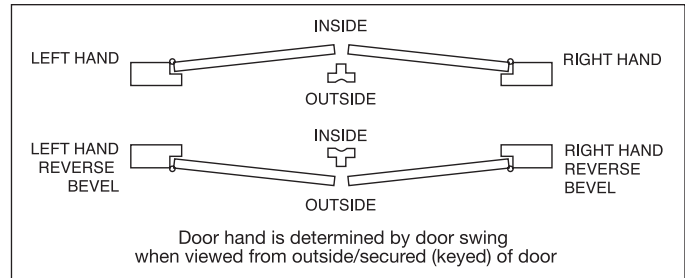
7900 Mortise Lock

Changing Lock Hand

Note: Handing of the lockbody:

1) The RED surface of the locking slide always faces the side of the door which will be locked. If it is not, change hand of locking slide (Step A)

2) The bevel (Angled surface on the latchbolt) must always face the strike. If it does not, change hand of latchbolt (Step B)

Door Handing

	INSIDE	
LEFT HAND		RIGHT HAND
	OUTSIDE	
LEFT HAND REVERSE BEVEL	INSIDE	RIGHT HAND REVERSE BEVEL
	OUTSIDE	

Door hand is determined by door swing when viewed from outside/secured (keyed) of door

Step A

**To change hand of <u>locking slide</u>**

1. Turn lockbody to side NOT marked with RED locking piece.
2. Insert blade type screwdriver into locking piece slot.
3. Push locking piece toward front of lockbody and rotate until RED shows.
4. RED indicates locked side (outside).

Locking slide slot

Red color indicates locked side of door
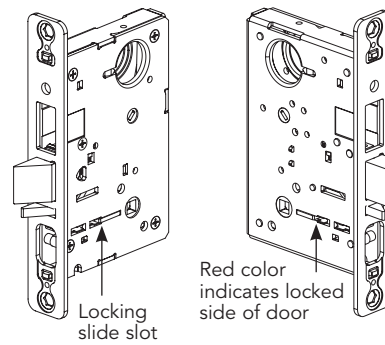
Step B

To change hand of latchbolt:

1. Remove the outside front by removing the two screws (as shown).
2. Depress inside front of lockbody on both sides of latchbolt.
3. Rotate the latchbolt by hand 180 degrees, so that the bevel of the latchbolt faces the strike.
4. Reattach the outside front with two screws.
5. The deadlatch is self adjusting.
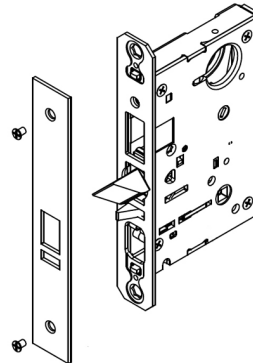
6 Lobe & Spanner Bit packs

Part Number	Descriptions
82-3855	6 Lobe Bit Pack 6 bits (sizes- T8, T9, T10, T15, T20, T25, T27) 9/32" Driver
82-3856	Spanner Bit Pack 5 bits (sizes- 6, 8, 10, 12, 14) 1/4" Driver

36- or 37- Option Security Screw Chart

Trim Designs	Functions																			
	04	15	16	24	25	26	37	38	43	45	50	55	65	66	70	71	72	73	93	94	95
O Roses	5	5	5	6	6	5	5	5	6	6	6	5	7	7	5	5	5	5	4	4	5
LW1/KW1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7
WT	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12

Note: 93 & 94 Function locks are not available with a security type screw on the door edge

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2.01 MORTISE LOCKSETS

A. Mortise locks shall be 7900 Series as manufactured by SARGENT Manufacturing Company, New Haven, CT.

B. Locks shall meet or exceed the requirements of ANSI/BHMA A156.13 Series 1000, Operational Grade 1 with all standard trims.

C. Locks shall be easily re-handed without opening the lock body.

D. Locks shall comply with UL 10C positive pressure requirements.

E. Locks required for fire doors shall be listed by Underwriters Laboratories for ratings of A label (3 hours) and less, for doors up to 4'0" (1.2m) x 10' 0" (3.0m) and pairs of doors 8'0" (2.4m) x 8'0" (2.4m).

F. Construction:

1. Lock functions shall be manufactured in a single-sized case.
2. Lock cases shall be closed on all sides and back.
3. Locks shall have field adjustable, beveled, armored front.
4. Locks shall have a 3/4" (19mm) throw one-piece stainless steel latchbolt.
5. Deadbolts, where specified, shall be full one inch (25mm) throw made of steel and have a hardened insert.

G. Locks shall have a 2-3/4" (70mm) backset, standard.

H. Strikes shall be non-handed with a curved lip.

I. To ensure proper alignment, trim, knobs or levers, shall be thru-bolted and fully interchangeable between rose and escutcheon.

J. Locks shall have brass 6-pin cylinder, standard.

K. Locks shall have a 5 year limited mechanical warranty, 2 year on electrical products.

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ASSA ABLOY Opening Solutions leads the development within door openings and products for access solutions in homes, businesses and institutions. Our offering includes doors, frames, door and window hardware, mechanical and smart locks, access control and service.

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SARGENT Manufacturing Company
100 Sargent Drive
New Haven, CT 06511 USA
800-727-5477
www.sargentlock.com

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