SCHLAGE®

D-Series
Extra Heavy Duty Commercial Knobs

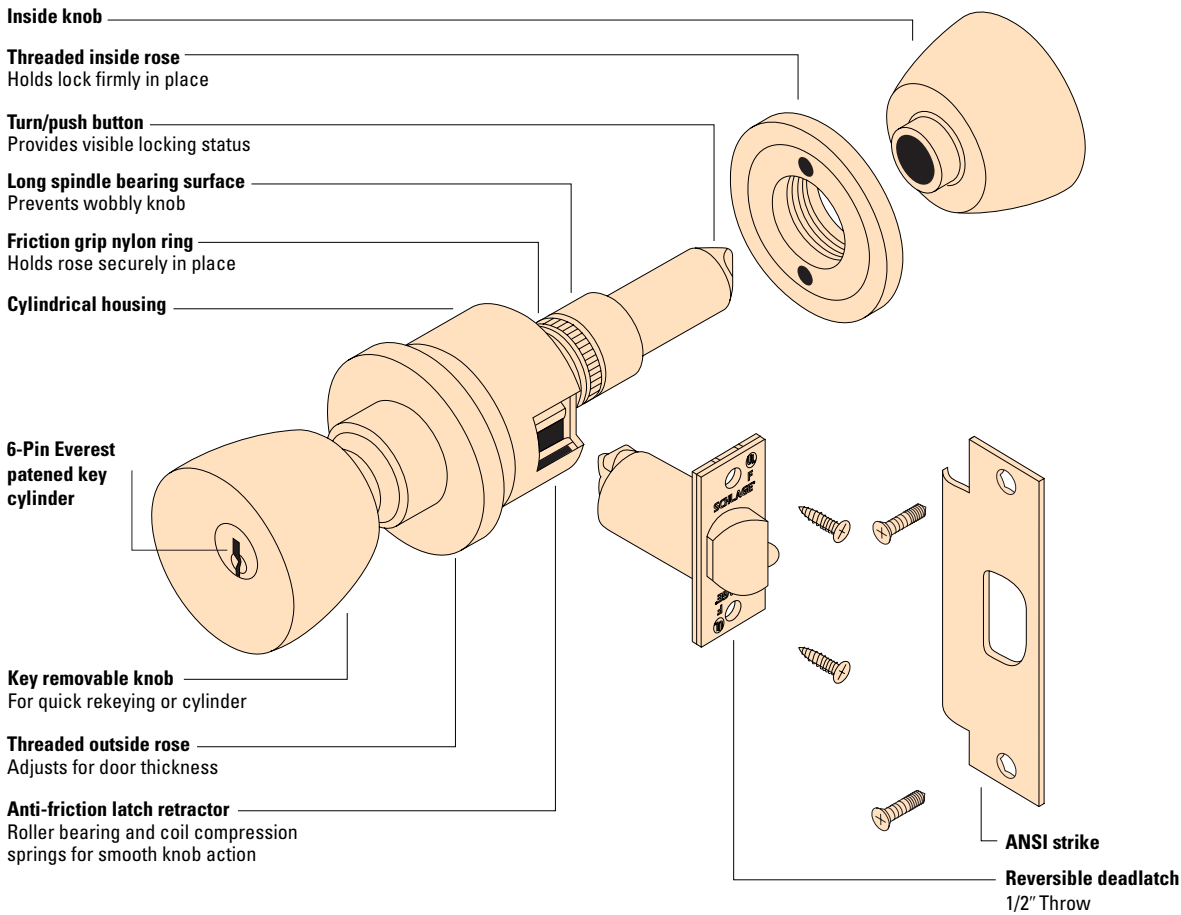## Extra Heavy Duty Commercial

D-Series locks are for commercial, institutional and industrial use, such as schools, hospitals and factories, where a long life of dependable operation must be combined with a high degree of resistance to physical abuse.

Performance Features

Exceeds 800,000 cycle ANSI Grade 1 requirements.

Exceeds ANSI A156.2 Series 4000 Grade 1 lock knob torque requirements.

Concealed mounting screws.

Cylindrical housing–heavy gauge cold rolled steel mechanisms are corrosion treated for normal atmosphere conditions.

Roller bearings and coil compression springs on latch retractors ensure long life and smooth action.

Threaded roses hold lock firmly in place.

Friction grip nylon ring holds rose securely in place.

Exploded View

Inside knob

Threaded inside rose
Holds lock firmly in place

Turn/push button
Provides visible locking status

Long spindle bearing surface
Prevents wobbly knob

Friction grip nylon ring
Holds rose securely in place

Cylindrical housing

6-Pin Everest patened key cylinder

Key removable knob
For quick rekeying or cylinder

Threaded outside rose
Adjusts for door thickness

Anti-friction latch retractor
Roller bearing and coil compression springs for smooth knob action

ANSI strike

Reversible deadlatch
1/2″ Throw

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Specifications

Handing:
Keyed functions of knob designs are field reversible.

Door Thickness:
1⅜″ to 2″ (35 mm–51 mm) standard.
2″ to 2½″ (51mm–64mm) optional.

Backset:
2¾″ (70 mm) standard. 2⅜″, 3¾″ and
5″ (60 mm, 95 mm, 127 mm) optional.

Faceplate:
Brass, bronze or stainless steel. 1⅛″ x 2¼″ (29 mm x 57mm) square corner, beveled. See page 8 for options.

Lock Chassis:
Steel, zinc dichromate plated for corrosion resistance.

Latch Bolt:
Brass, ½″ (12mm) throw, deadlocking on keyed and exterior functions. ¾″ (19 mm) throw anti-friction latch available for pairs of fire doors.

Exposed Trim:
Wrought brass, bronze or stainless steel.

Strike:
ANSI curved lip strike 1¼″ x 4⅞″ x 1³⁄₁₆″ lip to center standard. Optional strikes, lip lengths and ANSI strike box available. See page 9.

Cylinder & Keys:
6-pin Everest C123 keyway standard with two patented nickel silver keys per lock.
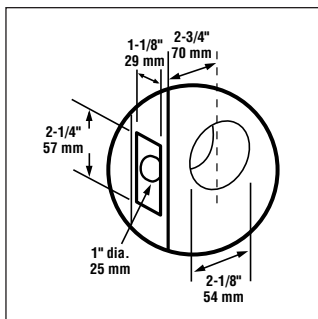
Keying Options:
Full size interchangeable core and Primus®
high security cylinders. Master keying, grand master keying and construction keying.

Warranty:
Three-year limited warranty.

Door Preparation

Knob Designs

Certifications

ANSI
Meets or exceeds A156.2 Series 4000, Grade 1 strength and operational requirements.
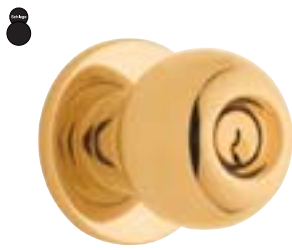
Federal
Meets FF-H-106C Series 161.

UL / cUL:
All locks listed for A label single doors, 4′ x 8′.
Letter F and UL symbol on latch front indicate listing.
Electrified functions are UL19X Listed for single point locking applications.
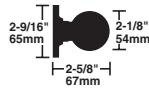UL437 Listed locking cylinder optional: specify Primus 20-500 Series cylinder.

Knob Designs & Finishes

ORBIT

Symbol: ORB
Material: Wrought brass, bronze, or stainless steel
Finishes:
605, 606, 609, 610, 611, 612, 613, 616, 625, 626, 629, 630
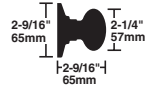
2-9/16" 65mm 2-1/8" 54mm 2-5/8" 67mm

605

PLYMOUTH

Symbol: PLY
Material: Wrought brass, bronze, or stainless steel
Finishes:
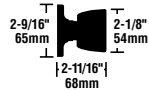605, 606, 609, 610, 611, 612, 613, 616, 625, 626, 629, 630

2-9/16" 65mm 2-1/4" 57mm 2-9/16" 65mm

626

TULIP

Symbol: TUL
Material: Wrought brass, bronze, or stainless steel
Finishes:
605, 606, 609, 610, 611, 612, 613, 616, 625, 626, 629, 630

2-9/16" 65mm 2-1/8" 54mm 2-11/16" 68mm

Keyed functions available with full size interchangeable core in Orbit knob design.

Finishes
605 Bright Brass
606 Satin Brass
609 Antique Brass
610 Bright Brass, Blackened
611 Bright Bronze
612 Satin Bronze
613 Oil Rubbed Bronze
616 Antique Bronze
625 Bright Chromium Plated
626 Satin Chromium Plated
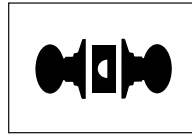629 Bright Stainless Steel
630 Satin Stainless Steel

Functions

Non-Keyed Functions

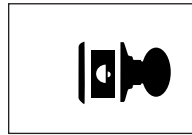| SCHLAGE	ANSI

D10S   F75   Passage Latch
Both knobs always unlocked.

D25D   Exit Lock
Blank plate outside. Inside knob always unlocked. (Specify door thickness, 1⅜″ or 1¾.″) Inside knob is always free for immediate egress.

**D40S   F76   Bath/Bedroom Privacy Lock**
Push-button locking. Can be opened from outside with small screwdriver. Turning inside knob or closing door releases button. Inside knob is always free for immediate egress.
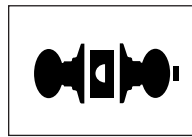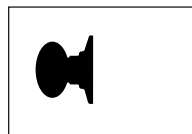
D44S   Hospital Privacy Lock
Push-button locking. Unlocked from outside by turning emergency turn-button. Turning inside knob or closing door releases button. Inside knob is always free for immediate egress.
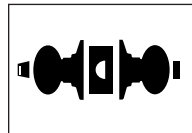
D170   Single Dummy Trim
Dummy trim for one side of door. Used for door pull or as matching inactive trim.

Single Cylinder Functions

| SCHLAGE	ANSI

D53PD   F109   Entrance Lock
Pushing button locks outside knob until unlocked by key or by turning inside knob. Pushing *and turning* button locks outside knob requiring use of key until button is manually unlocked. Inside knob is always free for immediate egress.
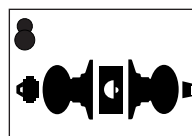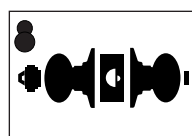
D70PD   F84   Classroom Lock
Outside knob locked and unlocked by key. Inside knob is always free for immediate egress.
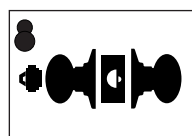
D73PD   F90   Corridor Lock
Locked or unlocked by key from outside. Push-button locking from inside. Turning inside knob or closing door releases button. Inside knob is always free for immediate egress.
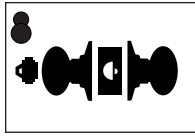
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Functions

Single Cylinder Functions *(Continued)*

SCHLAGE   ANSI

**D80PD   F86   Storeroom Lock**

Outside knob fixed. Entrance by key only. Inside knob is always free for immediate egress.

D85PD   F93   Hotel or Restroom Lock

Outside knob fixed. Entrance by key only. Push-button in inside knob activates "shutout mode" with visual occupancy indicator, allowing only emergency master key to operate. Rotating inside knob or closing door releases shutout mode, except when inside spanner-button has been rotated to keep lock in shutout mode. Inside knob is always free for immediate egress.
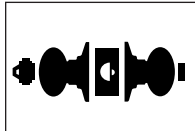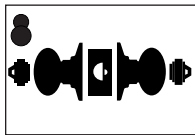
Double Cylinder Functions

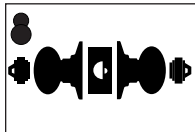SCHLAGE   ANSI

D60PD   F88   Vestibule Lock

Latch retracted by key from outside when outside knob is locked by key in inside knob. Inside knob is always free for immediate egress.

Store Door Lock

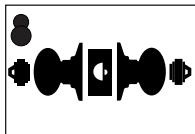**D66PD   F91**   Key in either knob locks or unlocks both knobs.†
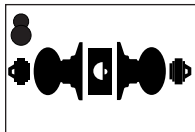
Communicating Lock

D72PD   F80   Key in either knob locks or unlocks its own knob independently. †

Institution Lock

D82PD   F87   Both knobs fixed. Entrance by key in either knob. †

Electrified Functions

D80PDEL
D12DEL*   **Electrically Locked (Fail Safe)**

Auxiliary latch deadlocks latchbolt when door is closed. Outside knob continuously locked electrically until unlocked by key, switch, or power failure. Inside knob is always free for immediate egress.
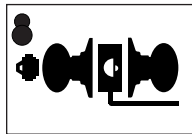
D80PDEU
D12DEU*   **Electrically Unlocked (Fail Secure)**

Auxiliary latch deadlocks latchbolt when door is closed. Outside knob continuously locked until unlocked by key or electric current. Inside knob is always free for immediate egress.
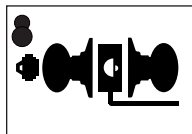
Mechanical and Electrical Control: Schlage D-Series locks are available for remote electrical locking and unlocking, for high security and fire safety applications.

Applications: Security control centers, cashier rooms, fire safety alarms, stairwell doors, telephone equipment rooms, computer rooms, hospital equipment and narcotics areas.

Controlling Devices: Security alarms, wall switches, security consoles, access card readers, thermo-sensitive devices, smoke and fire alarms, telephone access controls, automatic time devices, biometrics readers, computerized controls.

Electrical Requirements:
See page 10 for typical connection.

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†   **Caution:** Double cylinder locks on residences and any door in any structure which is used for egress are a life safety hazard in times of emergency and their use is not recommended. Installation should be in accordance with existing codes only.

Keyed functions available with interchangeable core in Orbit design.

Standard Cylinders

Schlage® locks are provided with cylinders precision built to extremely close tolerances and the highest standards of accuracy. Using only solid brass plugs, extruded brass shells, phosphor bronze springs, and nickel silver keys and pins ensures long life and ease of operation. For complete listing of cylinder parts, refer to the D-Series Service Manuals.

Conventional cylinders are available in Classic keyways or in the newly patented Everest® keyways. Specify keyway to differentiate between Everest and Classic. Example: C (Classic) vs. C123 (Everest).
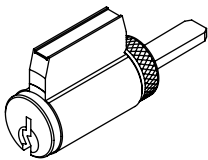
Primus® High Security Cylinders

Primus high security cylinders are available to add patented key control and varying degrees of geographical exclusivity to most Schlage 6-pin key systems, whether Everest or Classic keyways.

In addition to a conventional pin tumbler mechanism, Primus cylinders incorporate a patented finger pin and sidebar design providing a "dual-locking" cylinder that is virtually pick-proof. Resistance to drilling and other physical attack is optional by specifying 20-500 Series UL437 Listed cylinders.

Classic Primus cylinders are recommended for upgrading existing Classic key systems. Due to its extended patent life, the newly designed Everest Primus is recommended for new key systems and for upgrading existing Everest® key systems. Specify keyway to differentiate between Everest and Classic. Example: CP (Classic) vs. C123 (Everest).

Cylinder for Most Functions   **Hotel Function Indicator Cylinder**
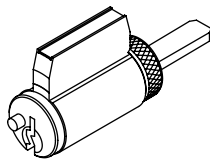
Standard Cylinders

Knobs	Description
23-001	6-Pin conventional (standard)
20-748	Primus high security
20-548	Primus UL437 Listed high security
23-003	6-Pin Hotel Function (D85) with occupancy indicator
21-017	Temporary construction plug, plastic

Available 606 and 626 finish only. Everest C123 keyway standard.
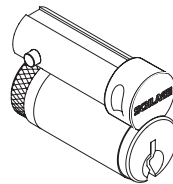
Full Size Interchangeable Core

Schlage® interchangeable core (IC) locksets allow immediate rekeying at the door simply by using the special *control key* to replace the core in seconds.

Available in all lever designs and the Orbit knob, full size interchangeable cores can be integrated into any 5 or 6-pin Schlage key with no adverse affects on keying capacity.

To order complete locks with full size cores, change suffix from **PD** to **RD**. Example: D53**RD**. To order locks *less core*, change suffix to **JD**. To order with full size *construction core*, change suffix to **TD**.

Full Size Interchangeable Cores

Number	Description
23-030	Conventional core
20-740	Primus high security core

Available 606 and 626 finish only. Everest C123 keyway standard.

Driver and Retainer*
04-033

*Required for upgrading IC locks manufactured before March 1992 to accept Everest or Primus cores.

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IC Retrofit Kits

To convert standard D-Series locksets to accept Schlage full size interchangeable cores, change the knob and add parts shown. Orbit design only.
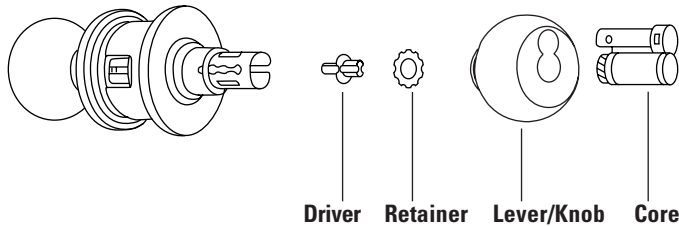
Full Size Interchangeable Core Retrofit

Number	Description
04-034	Retrofit kit (parts below + core, specifiy finish)
04-030	Driver, retainer, knob (specify finish)
04-033	Driver, retainer
04-031	Orbit knob only (specify finish)

Retrofit Kit
(Driver, retainer, knob, core)
04-034

Driver   Retainer   Lever/Knob   Core

IC Installation Tool

This tool is used to install the driver and retainer for full size IC in the D-Series and other Schlage cylindrical locksets. Its other ends are designed to install and remove mortise cylinder housings and test mortise cylinder cam action for both small format and full size interchangeable core cylinders.
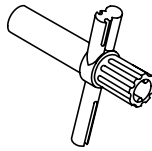

M504-413
(Order separately.)

Latches

D-Series latches are adjustable for flat or beveled edge doors. Latches and strikes are furnished in brass, bronze, or chrome finishes to be compatible with lock trim. When ordering, specify quantity, part number, and finish. All D-Series latches have ½″ throw and 1″ housings except 2⅜″ backset latches, which includes sleeve G506-815 to fill a 1″ edge bore. Standard latches are shown in bold type.
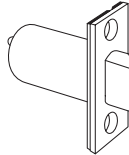
Latches

| Backset	Description	Deadlatch ½″ Throw	Springlatch ½″ Throw
2⅜″ 60mm	1⅛″ (29mm) x 2¼″ (57mm) square corner	14-047	–
	1″ (25mm) x 2¼″ (57mm) square corner	14-048	–
2¾″ 70mm	**1⅛″ (29mm) x 2¼″ (57mm) square corner**	**13-047**	**13-048**
	1⅛″ (29mm) x 2¼″ (57mm), ¾″ (19mm) throw for pairs of fire doors	14-042	–
3¾″ 95mm	1⅛″ (29mm) x 2¼″ (57mm) Square corner	14-028	14-010

Deadlatch
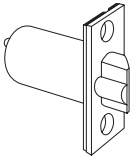
Springlatch

¾″ Throw Anti-Friction Deadlatch for Pairs of Fire Doors
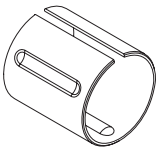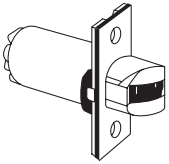
G506-815

Strikes

All Schlage strikes are furnished complete with screws. The standard D-Series strike has a 1³⁄₁₆″ lip.
When ordering separately specify quantity, product number, finish, and lip length. Standard strikes are shown in bold type.

Strikes

Number	Lip Length	Description
10-013	1 ⅛″ (28mm)	1 ⅛″ x 2 ¾″ (28mm x 70mm) Square corner, box 1 ¾″ (38mm)
10-016	1 ⅛″ (28mm)	1 ⅛″ x 2 ¾″ (28mm x 70mm), ¾″ (19mm) deep box for 14-042 fire door latch
10-025	**1 ³⁄₁₆″ (30mm)** **1 ⅜″ (35mm)**	**1 ¼″ x 4 ⅞″ (32mm x 124mm) ANSI**
K510-066	—	Box for 10-025 ANSI strike

Long Backsets

D-Series locks with 5″ backsets are normally furnished with 1⅛″ faceplates and 1″ housings. Links installed in metal doors require one A501-567 sleeve and 43-005 (order separately) to join latch and link.
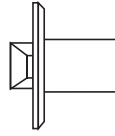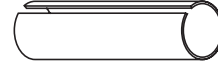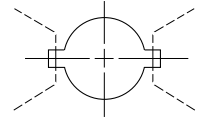
2-3/4″ Latch **Extension Link** (43-005) **Sleeve** (A501-567) (add to 2¾″ backset latch)
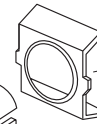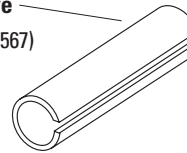

Door Reinforcement

Schlage 37-001 reinforcing kit is used to reinforce and help prevent the collapse of hollow metal doors when locksets are tightly mounted.

This kit should be used with long backsets for D-Series lock installations in hollow metal doors to prevent lateral movement of the latchbolt. Specify door thickness, 1⅜″ or 1¾″, when ordering reinforcement kits.

Reinforcement Kit (37-001)
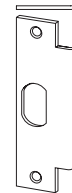
Sleeve (A501-567)

Reinforcement
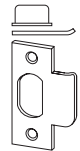1¾″ doors (A501-566) or 1⅜″ doors (A501-565)

ANSI Strike–Standard (10-025)
1 ¼″ x 4 ⅞″ x ³⁄₃₂″

Square Corner Box Strike (10-013)
1 ⅛″ x 2 ¾″ x ³⁄₃₂″

Strikes

All Schlage strikes are furnished complete with screws.
The standard D-Series strike has a 1³⁄₁₆″ lip.
When ordering separately specify quantity, product number,
finish, and lip length. Standard strikes are shown in bold type.

Strikes

Number	Lip Length	Description
10-013	1⅛″ (28mm) 1½″ (38mm)	1⅛″ x 2¾″ (28mm x 70mm) Square corner, box
10-016	1⅛″ (28mm)	1⅛″ x 2¾″ (28mm x 70mm), ¾″ 19mm deep box for 14-042 fire door latch
10-025	1³⁄₁₆″ (30mm) 1⅜″ (35mm)	1¼″ x 4⅞ (32mm x 124mm) ANSI
K510-066	—	Box for 10-025 ANSI strike

ANSI Strike–Standard
10-025
1¼″ x 4⅞″ x ³⁄₃₂″
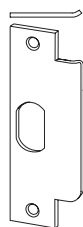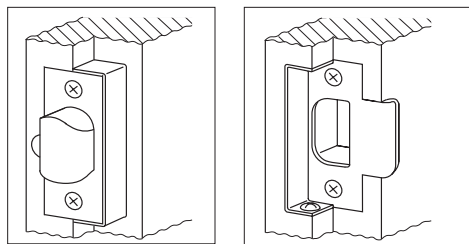
Square Corner Box Strike
10-013
1⅛″x 2¾″x ³⁄₃₂″
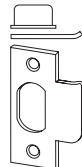
Rabbeted Latch and Strike Kit
Rabbeted latch and strike kit finishes: 605, 626.
This kit adapts square corner latches and 2¾″(28mm) high
strikes for ½″ (13mm) rabbeted door and frame preparations.

**Rabbeted Latch
and Strike Kit**
 39-030

Accessories and Adapters
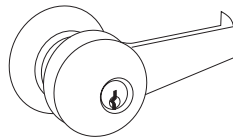
Retrofit Lever Handle
04-032

Number	Description
04-032	Retrofit lever for Orbit, Plymouth and Tulip knobs
38-018	Thin door spacer for knob locks. 2 req'd per lock , specify finish.
39-008	Instruction plate for D85 hotel function knob locks
A501-878	Latch front adapter for 1″ face plate in 1-1/8″ prep

Typical Wiring Diagram for Electrified Locks

AC Power Source – EL or EU
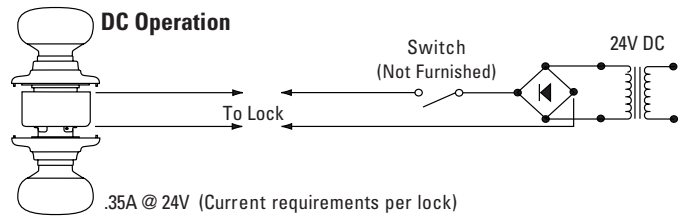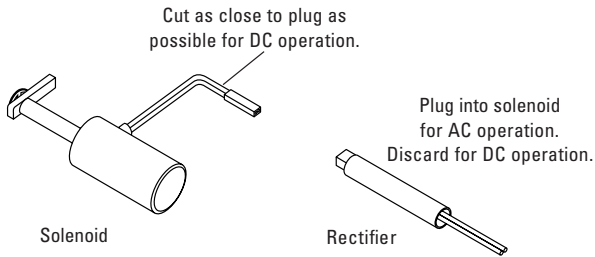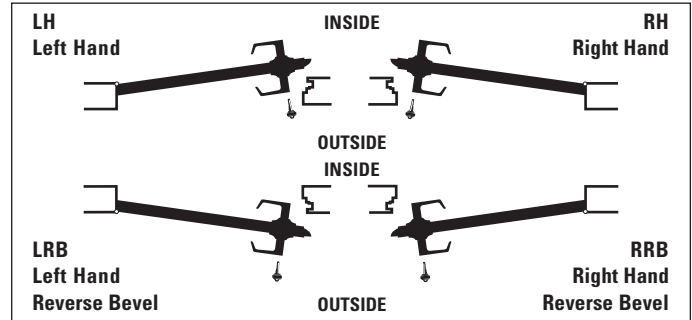
AC Operation

Rectifier

Switch
(Not Furnished)

Transformer
(Not Furnished)

To Lock

24V AC   115V AC

Plug

Rectifier used on AC operation unit only.
.15A @ 24V (Current requirements per lock)

DC Power Source – EL or EU

DC Operation

Switch
(Not Furnished)

24V DC

To Lock

.35A @ 24V (Current requirements per lock)

AC and DC Application

Cut as close to plug as
possible for DC operation.

Plug into solenoid
for AC operation.
Discard for DC operation.

Solenoid

Rectifier

Door Handing
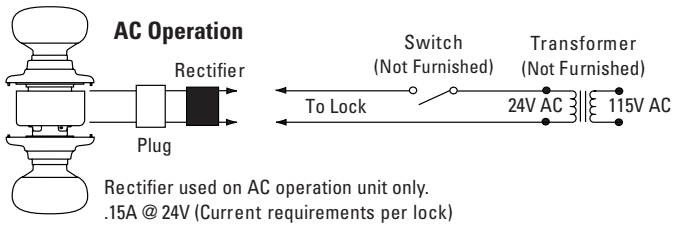
All Schlage® locks are reversible. Hand information is necessary for cylinder positioning in knobs, and to ensure proper finish of latchbolt and strike for split-finish locks. Follow the diagram to determine the hand of the door. The outside is the secure side or the corridor side.
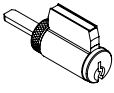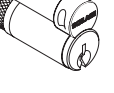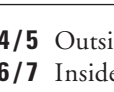
LH	INSIDE	RH
Left Hand		Right Hand

OUTSIDE

INSIDE

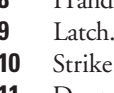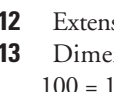| LRB		RRB
Left Hand Reverse Bevel	OUTSIDE	Right Hand Reverse Bevel

SCHLAGE

How to Order

To order Schlage products, descriptive data should be in the same sequence as shown.

Line Item	Qty	Product	Outside		Inside		Hand	Latch	Strike	Door Thickness	Ext	Dim	Additional Details
			Des	Fin	Des	Fin							
1	2	3	4	5	6	7	8	9	10	11	12	13	14

1 Line item number
2 Quantity
3 Complete model number with function and cylinder type

To order cylinder options, change "PD" at the end of the model number as follows:

D53PD Standard.

D53LD Less standard cylinder. For Primus cylinder, specify this option and order Primus cylinder separately.

D53CD With temporary plastic construction cylinder. Double cylinder functions ordered *less cylinder* are furnished with these construction cylinders to maintain timing of key cams.

D53JD Prepared for full size interchangeable core, less core. For Primus core, specify this option and order Primus core separately.

D53RD With full size conventional interchangeable core installed. Order control keys separately.

D53TD With full size (temporary) construction core installed. Order all keys separately.

4/5 Outside design / finish.
6/7 Inside design / finish. Leave blank if same as outside.
8 Hand. Required for keyed knob designs and all split finish locksets. One hand per line item.
9 Latch. Leave blank for standard or specify part number for optional latch. LLL=Less Latch.
10 Strike. Leave blank for standard or specify part number for optional strike. LLL=Less Strike.
11 Door thickness, if non-standard. Example: 200 = 2″.
12 Extension, to specify whether thick door is extended inside (EI), outside (EO), differently (ED) or equally (EE).
13 Dimension for strike lip lengths. See strike page for availability of specific dimensions with specific strikes.
   100 = 1″
   118 = 1⅛″
   114 = 1¼″
   138 = 1⅜″
   112 = 1½″
   134 = 1¾″
   200 = 2″
14 Keying detail (e.g. key symbol, keyway, bitting) and other special requirements.

EXAMPLE

Line Item	Qty	Product	Outside		Inside		Hand	Latch	Strike	Door Thickness	Ext	Dim	Additional Details
			Des	Fin	Des	Fin							
1	24	D10S	ORB	605					10-013	214	EE		
2	4	D50RD	PLY	613								138	C145 245793
3	60	D85PD	TUL	626				14-047					E 000000

Note: Schlage order forms are available at no charge by contacting your IR Sales Consultant or Customer Service.

Ingersoll Rand
Security Technologies

Ingersoll Rand's Security Technologies Sector is a leading global provider of products and services that make environments safe, secure and productive. The Sector's market-leading products include electronic and biometric access control systems; time and attendance and personnel scheduling systems; mechanical locks and portable security, door closers and exit devices, steel doors and frames, architectural hardware and technologies and services for global security markets.

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