

# 1190 / 2090 Series

## Heavy Duty Right Angle Electric Bolt Locks



Designed and patented by SDC, Spacesaver® right angle bolt locks represent a fundamental innovation in electric locking technology for access control applications. Spacesaver® bolts project at right angles to the lock mechanism, allowing installation of Spacesaver® locks, by means of a simple mortise cutout, in virtually any standard frame, or in most door lock stiles. With the entire lock concealed, aesthetic acceptability is complete, security is greater and installation in old or new construction is fast, easy and economical.

All Spacesaver® locks are equipped with stainless steel bolts, specification grade solenoids and automatic relock ball switches. Bolts rotate freely, making attempts to tamper or cut extremely difficult. Specification grade solenoids facilitate superior overall performance in both force and longevity, when compared to commercial grade solenoids. Automatic relock ball switches keep the bolt retracted while the door is open. The door depresses the ball switch on closure, causing the bolt to project automatically, locking the door. Additionally, ball switches are field adjustable to compensate for wide door gap and bidirectional to permit use on swinging and sliding doors.

**1190AI and 2090AH models** utilize a 3/4" diameter solid stainless steel bolt, an extra heavy duty housing design and solenoid. Designed to provide years of trouble free operation, 1190A and 2090AH bolt locks are the most powerful units available on the market. There are only three moving parts within the hefty solid metal body of the 1190AI and only five moving parts in the 2090AH. The power and strength of the solenoids far surpass any competitive models.



### MODELS

- 1190AI** Heavy Duty Right Angle Bolt Lock, Failsafe
- 2090AH** Heavy Duty Right Angle Bolt Lock, Failsecure



### STANDARD FEATURES

- Concealed mortise right angle design
- Stainless steel bolt
- Specification grade solenoid
- Automatic relock
- Field adjustable and bidirectional automatic relock ball switch
- Mounting tabs included
- Voltage and current spike protection
- Power regulator included\*

\* For 1190A models only.



### OPTIONAL FEATURES

- Door position status (DPS)
- Bolt position status (BPS)



## APPLICATIONS

### FAILSECURE OPERATION

Bolt retracts when energized. Bolt thrown when de-energized or during a power failure. Recommended for high security applications only. 2090A models are failsecure.

### FAILSAFE OPERATION

Bolt thrown when energized. Bolt retracts when de-energized or during a power failure. Recommended for fire life safety applications. 1190A models are failsafe.

### WOOD APPLICATIONS

Wood applications require a larger faceplate. 1190AIWD models are failsafe operating bolt locks for wood applications and utilize a 11" x 1 3/4" x 1/8" faceplate.



**1190AIU**  
**1190AIWDU**

**2090AHU**

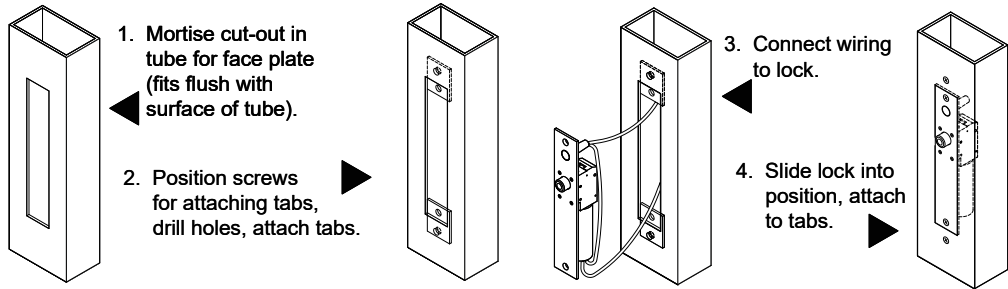
## CROSS REFERENCE

Series	1091 / 1291	1190 / 2090	1490 / 2490	FS23M
<b>Type</b>	Right Angle	Right Angle	Right Angle	Right Angle
<b>Application</b>	Standard 1 3/4"	Heavy Duty	Narrow 1 1/2"	Dual Failsafe
<b>Failsafe</b>	1091AI	1190AI	1490AI	FS23MI
<b>Failsecure</b>	1291AH	2090AH	2490AH	-----
	<a href="#">CLICK TO VIEW</a>		<a href="#">CLICK TO VIEW</a>	<a href="#">CLICK TO VIEW</a>
Series	100 / 200	GL	PD2090	290
<b>Type</b>	Conventional	Specialty	Specialty	Specialty
<b>Application</b>	Mortise or Surface Mount	Gate Lock	Panic Device Top Latch Release	Micro Cabinet
<b>Failsafe</b>	110I, 160I, 180AI	GL160AI, GL163AI	-----	290
<b>Failsecure</b>	210H, 260H, 280AH	GL260AH, GL263AH, GL260MRAH	PD2090A	290
	<a href="#">CLICK TO VIEW</a>	<a href="#">CLICK TO VIEW</a>	<a href="#">CLICK TO VIEW</a>	<a href="#">CLICK TO VIEW</a>

 SPECIFICATIONS

	1190AI	2090AH
<b>Mount</b>	Mortise	Mortise
<b>Operation</b>	Failsafe	Failsecure
<b>Bolt</b>	¾" Diameter Solid Stainless Steel	¾" Diameter Solid Stainless Steel
<b>Bolt Throw</b>	¾"	¾"
<b>Faceplate</b>	8" x 1½" x ⅛" 11" x 1¾" x ⅛" (1190AIWD)	8" x 1½" x ⅛"
<b>Strike</b>	4" x 1½" x ⅛"	4" x 1½" x ⅛"
<b>ID Requirements</b>	8" x 1½" x 1½"	10" x 1½" x 1½"
<b>Weight</b>	3 lbs	3 lbs
<b>Input</b>	24 VDC ± 10%	24 VDC ± 10%
<b>Current Draw</b>	700 mA	2.5 Amp Inrush 500 mA Continuous
<b>Monitoring Contacts</b>	SPDT 4 Amps @ 30 VDC Resistive	SPDT 4 Amps @ 30 VDC Resistive

All Spacesaver locks are easily installed in any existing entrance merely by mortising out a cut-out, attaching the wiring, inserting the lock, and bolting it into position with two attaching tabs. Cutting studs are no longer a problem or expense.





## CERTIFICATIONS

UL 10C Positive Pressure Fire Tests of Door Assemblies  
 ULC-S104 Standard Method for Fire Tests of Door Assemblies  
 ULC-S533 Egress Door Securing and Releasing Devices

## HOW TO ORDER

### FOLLOW STEPS FOR ORDERING

 Designates optional step

<p><b>1  SPECIFY MODEL</b></p> <p><b>1190AI</b> Heavy Duty Right Angle Bolt Lock, Failsafe  <b>2090AH</b> Heavy Duty Right Angle Bolt Lock, Failsecure</p> <p><b>2  SPECIFY FUNCTION</b></p> <p><b>WD*</b> Wood Applications  <i>* For 1190AI failsafe models only.</i></p>	<p><b>3  SPECIFY FINISH</b></p> <p><b>U</b> 630 Dull Stainless </p> <p><b>4  SPECIFY OPTIONS</b></p> <p><b>D</b> Door Position Status (DPS)  <b>B</b> Bolt Position Status (BPS)</p>
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<b>STEP NUMBER:</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>ORDERING EXAMPLE:</b>	<b>1190AI</b>	<b>U</b>	<b>D B</b>