

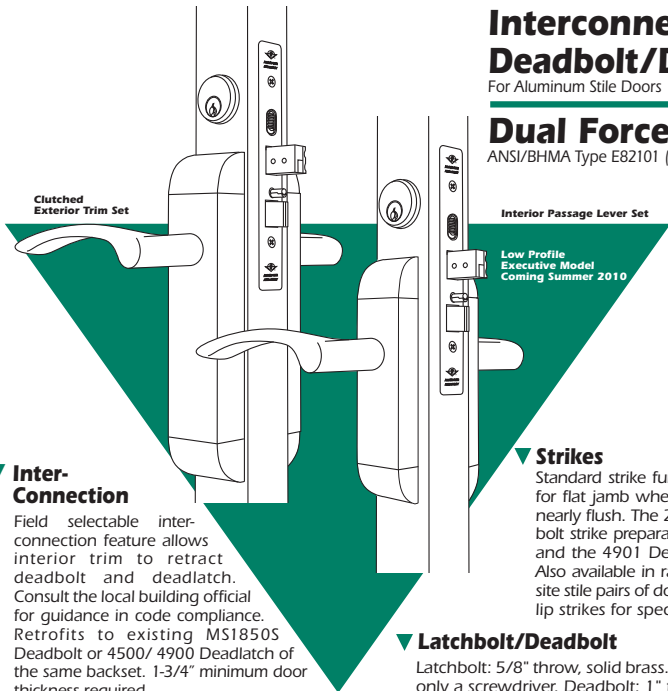


Interconnected Deadbolt/Deadlatch

For Aluminum Stile Doors

Dual Force® 2190

ANSI/BHMA Type E82101 (Grade 1)



Inter-Connection

Field selectable inter-connection feature allows interior trim to retract deadbolt and deadlatch. Consult the local building official for guidance in code compliance. Retrofits to existing MS1850S Deadbolt or 4500/ 4900 Deadlatch of the same backset. 1-3/4" minimum door thickness required.

Faceplates

1" X 6-7/8" Includes FaceStyle faceplate system that adapts to flat, radius, or beveled door edge. Radius with weatherseal faceplate available separately.

Function

The Dual Force 2190 combines the access control capabilities of a latch with the security of a deadbolt. The key retracts and extends the deadbolt (and deadlatch) from either side. The exterior lever retracts the latch only while the inside lever retracts the deadbolt and latch simultaneously for fast, easy, panic-proof exiting.

Strikes

Standard strike furnished is the 2101-01 for flat jamb where door closes flush or nearly flush. The 2101 covers MS® Deadbolt strike preparation with modification, and the 4901 Deadlatch strike directly. Also available in radius version for opposite stile pairs of doors and with extended lip strikes for special jamb conditions.

Latchbolt/Deadbolt

Latchbolt: 5/8" throw, solid brass. Easily reversible using only a screwdriver. Deadbolt: 1" throw, stainless steel.

Cylinder Backset

1-1/8" or 1-1/2" only.

Auxiliary Deadlatch Pin

Stainless steel. Deadlocks latch bolt to prevent "loiding" or case-knife entry.

Operation

Key or thumbturn retracts or extends deadbolt or deadlatch. Inside lever retracts both when configured with interconnect feature. Outside lever retracts latch only. Latch holdback feature activated or deactivated by turning key to retract latch and sliding holdback button on faceplate down to hold and up to release.

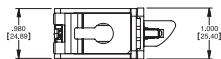


2190 Interconnected Deadbolt/Latch

SW-5

DIMENSIONS

INCHES
MILLIMETERS
Nominal, subject to tolerance extremes.



HOW BACKSET IS MEASURED

CYLINDER



FLAT



RADIUS

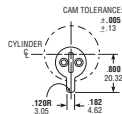
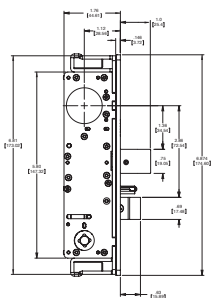


BEVEL



BACKSET	"A"
1-1/8"	1.78 28.6
1-1/2"	2.25 38.1

ARMORED FACEPLATE 1" x 6-7/8"	
FLAT (INCLUDED) 24-0066-01	
RADIUS (INCLUDED) 24-0066-02	
RADIUS w/WEATHERSTRIP PART # 24-0066-03	



Cylinder Cam

2190 Series locks are operable by any standard 1-5/32" diameter mortise cylinder with special MS® cam dimensioned as shown. Cylinders with MS® cams can be readily obtained from most cylinder manufacturers. See page SW-73 for cylinder make and trim information.

OPTIONS

Specify exterior entry or interior passage-set lever option, lever style, finish and strike. Also adapts to paddle operator 4591. See 2290 for wood or steel door version for stile and rail type door construction.

ELECTRIFIED TRIM OPTIONS

Order electrification kit [EK-2190] for adding to the clutched exterior lever. Dual voltage 12/24 VDC rated for continuous duty operation. Energizing the lever allows exterior lever to be turned to retract latch only.

STANDARD PACKAGE

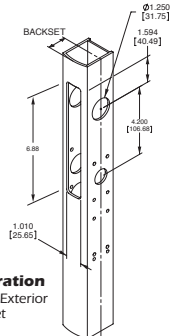
Individually boxed with strike and machine screws for mounting and trim as specified. Cylinders available separately at extra cost. Shipping weight: 2 lbs.

INSTALLATION

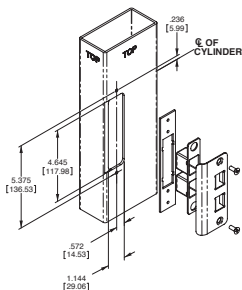
Cutout same as MS1850S
Deadbolt plus holes for
handle mounting

CUTOUT
TOLERANCE:
+ 0.015 +0.38
- 0.000 - 0.0

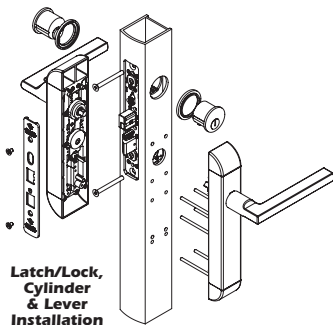
MAXIMUM GAP
DOOR TO JAMB:
0.125
(3.1)



Stile Preparation
For Clutched Exterior
Trim Set



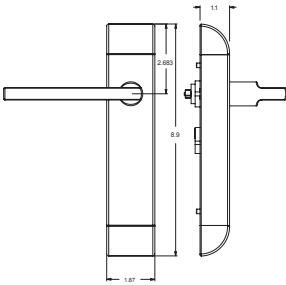
Jamb Preparation
2101 Strike (Covers and
previous cutout for
MS® Deadbolt) - Retrofits
4901 and 4501
strike preparations



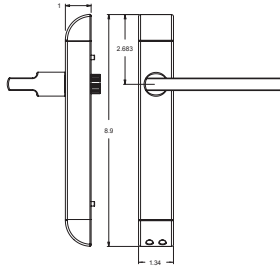
**Latch/Lock,
Cylinder &
Lever
Installation**

DIMENSIONS

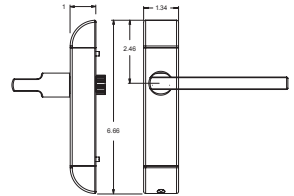
INCHES
MILLIMETERS



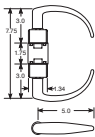
OUTSIDE



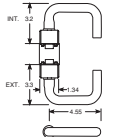
INSIDE



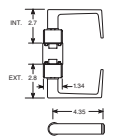
INTERIOR PASSAGE



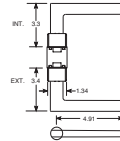
2190 with O1 Lever*



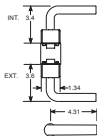
2190 with O2 Lever*



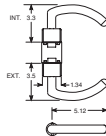
2190 with O3 Lever*



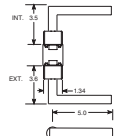
2190 with MD Lever



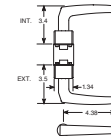
2190 with ME Lever



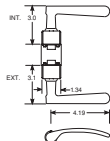
2190 with MG Lever



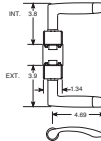
2190 with MI Lever



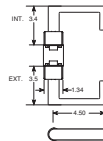
2190 with MJ Lever



2190 with MN Lever



2190 with MV Lever



2190 with MW Lever

*The 2190-01, -02, and -03 lever handles are designed to return within 1/2" of the door face.

Handles in the Designer Series do not have this same feature. Please verify with local code requirements to ensure compliance.



Swinging Door Hardware

SW-5

Handle Sets

DESIGNER HANDLES



2190-MV



2190-MG



2190-MD



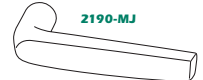
2190-ME



2190-MN



2190-MW



2190-MJ



2190-MI

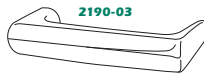
STANDARD HANDLES*



2190-01



2190-02



2190-03

*The 2190-01, -02, and -03 lever handles are designed to return within 1/2" of the door face. Handles in the Designer Series do not have this same feature. Please verify with local code requirements to ensure compliance.

HOW TO ORDER

Specify quantity and the following information.

2190 - 3 1 1 - 0 0 0 - 10B

Strike

- 1 Standard Flat
- 2 Radius Strike
- 3 Flat/centerhung 4"
- 4 Flat/centerhung 4.5"
- 0 None

Faceplate Finish

- 1 628
- 2 313
- 3 335

Trim

- 0 None
- 1 w/Trim Set
- 2 w/Electricified Trim Set
- 3 Passage Set

Backset

- 3 1-1/8" Backset
- 4 1-1/2" Backset

Handle Designation:

00 - No Handle

STANDARD SERIES:

- 01 - Curve
- 02 - Round
- 03 - Square

DESIGNER SERIES:

- MD MJ
- ME MN (Handed)
- MG MV
- MI MW

Trim and Handle Finish

- 03 - Bright Brass (US3/605)
- 04 - Satin Brass (US4/606)
- 09 - Bright Bronze (US9/611)
- 10 - Satin Bronze (US10/612)
- 10B - Dark Bronze (US10B/121P)
- 32 - Bright Stainless (US32/629)
- 32D - Satin Stainless (US32D/630)