Locknetics provides the industry’s most complete selection of electromagnetic locks. The 280+ Series Shear Lock features a patented design which is smaller, stronger and easier to install than earlier generations of Shear Locks, even in retrofit applications. The 280+ Series mortise design electromagnetic Shear Lock has an innovative “Power Plus” control module to overcome gaps of up to 1/4”.

This mortise Shear Lock offers the advantage of a totally concealed locking mechanism, which provides superior security and appearance. With holding forces tested to 2700 lbs., the Locknetics 280+ Series provides extra high security and easy engagement of magnet and armature. The armature literally “jumps” to the magnet. The patented design engages locking tabs, secured to the magnet, with locking grooves in the armature. While the strength of this design is a major advantage, the flexibility in tolerance is even more important. This design allows for normal door and frame movement, assuming a good quality door and frame are used.

The compact size of the magnet fits into header construction with minimum preparation. It easily fits aluminum store front tube extrusions. The 280+ Shear Lock is ideal for hollow metal doors and frames.

The 280+ TRD model is available when armature adjustment is required from the edge of the door due to flush ceiling conditions.

The 280+ Series Shear Lock is UL 10C, CUL, and CSFM Listed and engineered to meet the ANSI/BHMA standard for electromagnetic locks.

**Benefits of Using 280+ Mortise Mounted Series Shear Locks**

- Innovative “Power Plus” control module provides force to overcome gaps of up to 1/4” between magnet and armature
- 2700 lbs. of holding force
- Requires filtered, regulated power supply
- External Automatic Relock Switch (ARS)
- Adjustable time delay on relock, 0-30 seconds
- Low temperature operation
- Microprocessor controlled
- Optional Magnetic Bond Sensor (MBS)
- Automatic voltage selection 12VDC/24VDC (Filtered)
- Universal hardware for installation into flush or recessed (1/8” to 2 1/4” depth) door edge
- Door position switch to prevent premature relock
280+ Mortise Mounted Series Shear Locks
Special Application Solution

How to Order 280+ Mortise Mounted Series

Select Model
Select Option
Select Accessories

1. Select Model
280+ Standard Unit
280+TRD Top Rail Door

2. Select Options
MBS Magnetic Bond Sensor verifies proper armature contact with magnet face and detects reduced holding force – SPDT 1 amp @ 30 VDC

3. Select Accessories
DOOR STATUS SWITCHES – External, concealed door status monitor switches
679-05 For wood door and wood frame. SPDT 0.3 amp @ 30 VDC
679-05 HM For hollow metal door and frame. SPDT 0.3 amp @ 30 VDC
679-05 WD For wood door with hollow metal frame. SPDT 0.3 amp @ 30 VDC

Specifications:
Holding Force 2700 lbs.
Input 12/24 VDC
Current Draw .90A @ 12VDC
.45A @ 24VDC
Wiring Leads - from control module
MTG Type Mortise

Dimensions*

<table>
<thead>
<tr>
<th>L</th>
<th>H</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>Lock Body</td>
<td>7&quot;</td>
<td>1-1/4&quot;</td>
</tr>
<tr>
<td>with Mounting Tabs</td>
<td>8-9/16&quot;</td>
<td>1-1/4&quot;</td>
</tr>
<tr>
<td>Armature</td>
<td>6-1/8&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>Yoke</td>
<td>8-1/4&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>Yoke with Mounting Tabs</td>
<td>9-13/16&quot;</td>
<td>1&quot;</td>
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</table>

* In mortise applications, “H” refers to depth into the door or frame. “D” refers to the width of the part.

Mortise Shear Lock Applications

The 280+ Locks are designed for use with single doors, pairs of doors and double acting doors (that come to a true 0 degree stop). Custom applications include turnstile type doors.

280+
For metal door and frame or glass door with top rail and metal frame. Magnet is mortised into frame header and armature is mortised into top edge of door. Universal hardware for installation into flush or recessed (1/8” to 2-1/2”) depth door edge. Armature adjustment from top edge of the door. Magnet can also mount vertically into frame and armature into vertical edge of door, with armature adjustment from latch edge of door. The unit includes a low temperature module to facilitate wood door and frame applications.

280+ TRD
For metal door and frame or glass door with top rail and metal frame. Recommended for zero clearance condition between top of door and ceiling. Includes top rail door mounting assembly which provides armature adjustment from the latch edge of the door.
GF3000 Mortise Mounted Series Shear Locks

**Special Application Solution**

Locknetics provides the most complete selection of electromagnetic locks in the industry. The GF3000 Series Shear Lock features a patented design offering advances over any Shear Lock on the market.

Unique mounting features provide a “floating” action of both the lock assembly and the armature. This design allows the magnet assembly to move towards the armature during the locking process. In this manner, the GF3000 is able to overcome gaps of up to 1/4 inch without current inrush. Once engaged, the Shear Lock provides 3000 pounds holding force, without high operating temperatures normally associated with other Shear Locks. A microprocessor-based control module provides advanced electronic features. This circuitry automatically senses and adjusts input voltage, allowing for operation from 12 to 24 volt DC power sources.

The mortise Shear Lock offers the advantage of a totally concealed locking mechanism, providing superior security and appearance. The patented design incorporates locking “tabs” on the magnet assembly with mating grooves in the armature plate. While the strength afforded by this design is a major advantage, the flexible mounting features are as important. This design allows for normal door and frame movement.

The Shear Lock is ideally suited for commercial grade quality hollow metal doors and frames as well as herculite doors with top rail. Advances in design provide low operating temperatures, making this Shear Lock suitable for use in the growing demand for concealed locks in wood frames.

The GF3000 TRD Model is available when armature adjustment is required from the edge of the door due to flush ceiling conditions. The GF3000BRD model is available when no top rail mounting is available. All models offer built-in automatic relock features ensuring full door closure before lock engagement. Relock time delay is easily adjusted from 1 to 30 seconds from the face of the installed lock. Optional features include Magnetic Bond Sensor (MBS) to monitor the secure/not secure condition of the lock and an optional Door Status Monitor (DSM) to sense the open/closed position of the door.

The GF3000 Series of Shear Locks are UL 10C, CUL, CSFM and MEA listed for use on fire labeled openings. The locks are engineered to meet ANSI/BHMA A156.23 standard for electromagnetic locks.

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**Benefits of Using GF3000 Mortise Mounted Series Shear Locks**

- Automatic voltage selection 12/24 VDC (Filtered)
- Innovative gravity force design provides for movement of both lock and armature to overcome gaps of up to 1/4”
- 3000 lbs. of holding force
- Requires filtered, regulated power supply
- Built-in Automatic Relock Switch
- Adjustable time delay on relock, 0-30 seconds
- Low temperature operation
- Microprocessor controlled
- Optional Magnetic Bond Sensor (MBS)
- Optional Door Status Monitor (DSM)

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Questions? Call: 866-322-1237 • FAX: 866-322-1233 • Visit us on the Internet at www.locknetics.com

IR Security & Safety Electronic Access Control • 575 Birch Street • Forestville, CT 06010

CSFM MEA 14-95-6
GF3000 Mortise Mounted Series Shear Locks

Special Application Solution

How to Order GF3000 Mortise Mount Series

1. Select Model

   GF3000 - Adjustable from top edge of door.
   GF3000TRD - Mounting assembly which provides armature adjustable from the latch edge of the door. Recommended with zero clearance condition between top of door and ceiling.
   GF3000BRD - Mounting assembly to mortise armature into bottom rail of door. Magnet is installed in floor/threshold. Provides solution when no top rail is available.

2. Select Options

   DSM/MBS - Door Status Monitor/Magnetic Bond Sensor
   DSM - Door Status Monitor
   MBS - Magnetic Bond Sensor

GF3000
For metal door and frame or glass door with top rail and metal frame. Magnet is mortised into frame header and armature is mortised into top edge of door. Universal hardware for installation into flush or recessed (1/8” to 2-1/2”) depth door edge. Armature adjustment from top edge of the door. Magnet can also mount vertically into frame and armature into vertical edge of door, with armature adjustment from latch edge of door. The unit includes a low temperature module to facilitate wood door and frame applications.

GF3000BRD
For metal door and frame or glass door with bottom rail and metal frame. The magnet is installed in the floor/threshold and the armature is installed in the bottom edge of the door. This application provides a solution when no top rail mounting is available. Recommended mounting electronic module remote from locking mechanism.

GF3000TRD
For metal door and frame or glass door with top rail and metal frame. Recommended for zero clearance condition between top of door and ceiling. Includes top rail door mounting assembly which provides armature adjustment from the latch edge of the door.

Specifications:

- **Holding Force:** 2700-3000 lbs.
- **Current Draw:**
  - 0.90 Amp @ 12VDC
  - 0.45 Amp @ 24VDC
- **Weight:** 7 lbs.
- **Lock Body:**
  - Length: 9/8"
  - Height: 1/8"
  - Depth: 1/8"

  w/ Mounting Tabs:
  - Length: 11 3/16"
  - Height: 1/8"
  - Depth: 1/8"

- **Armature:**
  - Length: 8 3/8"
  - Height: 1 1/4"
  - Depth: 1/2"

- **Armature Bracket:**
  - Length: 10 3/8"
  - Height: 1 1/8"
  - Depth: 1"
Locknetics provides the most complete selection of electromagnetic locks in the industry. The GF3000 Series Shear Lock features a patented design offering advances over any Shear Lock on the market.

Unique mounting features provide a “floating” action of both the lock assembly and the armature. This design allows the magnet assembly to move towards the armature during the locking process. In this manner, the GF3000 is able to overcome gaps of up to 1/4 inch without voltage or current inrush. Once engaged, the Shear Lock provides 3000 pounds holding force, without high operating temperatures normally associated with other Shear Locks. A microprocessor-based control module provides advanced electronic features. This circuitry automatically senses and adjusts input voltage, allowing for operation from 12 to 24 volt DC power sources.

The surface Shear Lock offers the advantage of a totally concealed locking mechanism, providing superior security and appearance. The patented design incorporates locking “tabs” on the magnet assembly with mating grooves in the armature plate. While the strength afforded by this design is a major advantage, the flexible mounting features are as important. This design allows for normal door and frame movement.

This Surface Shear Lock offers maximum versatility in application. The GF3000SM model provides a low profile, surface mount lock for outswinging doors. The GF3000TJ model provides a low profile, surface mount lock for inswinging doors. It provides a unique mounting solution with no brackets needed, which are standard with direct pull magnets. The GF3000SC model provides a semi-concealed variation, with the magnet mortised into the frame and the armature surface mounted on the door. The GF3000SC-HD model is also semi-concealed and includes a Herculite door bracket to mount the armature housing on a glass door with no top rail.

The GF3000SM and TJ models feature a black anodized housing with the choice of modular finish plates (see finish selection on How to Order page).

All models offer built-in automatic relock features ensuring full door closure before lock engagement. Relock time delay is easily adjusted from 0 to 30 seconds from the face of the installed lock. Optional features include Magnetic Bond Sensor (MBS) to monitor the secure/not secure condition of the lock and an optional Door Status Monitor (DSM) to sense the open/closed position of the door.

The GF3000 Series of Shear Locks are UL 10C, CUL, CSFM, and MEA Listed for use on fire labeled openings. The locks are engineered to meet ANSI/BHMA A156.23 standard for electromagnetic locks.

Benefits of Using GF3000 Surface Mounted Series Shear Locks

- Built-in Automatic Relock Switch
- Innovative Gravity Force design provides for movement of both lock and armature to overcome gaps of up to 1/4"
- 3000 lbs. of holding force
- Automatic Voltage Selection 12/24 VDC (filtered)
- Standard time delay on relock, adjustable 0-30 seconds
- Low temperature operation
- Microprocessor controlled
- Optional Magnetic Bond Sensor (MBS)
- Optional Door Status Monitor (DSM)
- Modular, slide-in in finish plates on SM and TJ models
GF3000 Surface Mounted Series Shear Locks

Special Application Solution

How to Order GF3000 Surface Mount Series

GF3000SM – DSM/MBS – 628

Select Model
Select Option
Select Finish

1. Select Model
   GF3000SM  Standard Unit (outswinging doors)
   Adjustable from top edge of armature. Available in special finishes.
   GF3000TJ  Top Jamb Unit (inswinging doors)
   Magnet mounts on inside top jamb. Adjustable from top edge of armature. Available in special finish.
   GF3000SC  Semi - Concealed Unit (outswinging doors)
   Magnet is concealed in the frame and the armature assembly is surface mounted.
   GF3000SC-HD Semi - Concealed Unit (outswinging doors) Not Available in special finishes
   Magnet is concealed in the frame and the armature assembly is surface mounted
to a glass door.

2. Select Options
   DSM/MBS  Door Status Monitor/Magnetic Bond Sensor
   DSM     Door Status Monitor
   MBS     Magnetic Bond Sensor

3. Select Finish  (for GF3000SM & GF3000TJ only)
   628  US28  Satin Aluminum, Anodized (standard)
   335  US19  Satin Black, Anodized
   613  US10B Dark Satin Bronze, Anodized
   626  US26D Satin Chrome
   606  US4   Satin Brass
   630  US32D Satin Stainless Steel
   612  US10  Satin Bronze
   625  US26  Bright Chrome
   605  US3   Bright Br lbs.

Specifications:
   Holding Force: 3000 lbs.
   Current Draw: .90 Amp @ 12VDC
                 .45 Amp @ 24VDC
   Weight: 8.5 lbs. (SM, TJ suffix)
            11.5 lbs. (SC, SC-HD suffix)
   Lock Body:
   Length:  9½”
   Height:  1½”
   Depth:   1½”
   Armature:
   Length:  8½”
   Height:  1½”
   Depth:   1½”

Finishes available for GF3000SM and GF3000TJ Series only: Housing finished in Satin Black Anodized Finish - 335.
Architectural Finish Plate furnished standard in Satin Aluminum, clear anodized.
GF3000 Surface Mounted Series Shear Locks

Special Application Solution

Surface Shear Lock Applications
The GF3000 Series Surface Shear Locks are designed for use with single or pairs of doors, inswinging or outswinging. A unique inswing model eliminates brackets, standard with direct pull electromagnetic locks.

GF3000 SM
For metal door and frame, glass door with top rail and metal frame, or wood door and frame. For outswinging door applications. Armature adjustment from top edge of the armature.

GF3000 TJ
For metal door and frame, glass door with top rail and metal frame, or wood door and frame. For inswinging door applications. Unique design eliminates brackets with top jamb application. Armature adjustment from top edge of the armature.

GF3000 SC
Semi-concealed model. Magnet is concealed in the frame and the armature assembly is surface mounted on the door. For metal door and frame, glass door with top rail and metal frame, or wood door and metal frame. For outswinging door applications. Unique design when mortise top rail application is not available. Armature adjustment from top edge of the armature.

GF3000 SC-HD
Semi-concealed model with Herculite door bracket. Magnet is concealed in the frame and the armature assembly is surface mounted on the door with a Herculite door bracket. This U-shaped bracket is used on a glass door when no top rail is present. For outswinging door applications. Armature adjustment from top edge of the armature.