

# Electrified Solutions



Hager Companies offers a range of electrified door hardware to help you meet customer expectations while also meeting building codes and ensuring life safety. Hager's complete electrified solutions are proven designs with versatile applications and simplified installation.

Hager's line of electric strikes fit any application. All of our strikes have compact designs, are non-handed, and can be field selectable to fail safe or fail secure configurations allowing for universal installations and simpler inventory management.

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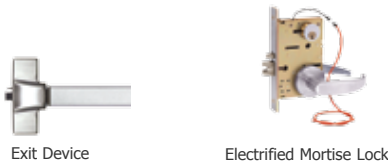
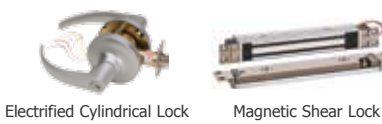




## COMPONENT SELECTION

### 1 Locking Devices (Pages 5-21)

- Electric Strike
- Delayed Egress
- Electrified Lockset
- Exit Device
- Frame Actuator Lockset
- Magnetic Lock



### 2 Access Controls (Pages 23-27)

- Standalone or Network
- Keyswitch
- Digital Keypad
- Card Reader



Keyswitch



Digital Keypad



Keypad with Proximity



Under Desk Push Switch

### 3 Egress Devices (Pages 29-36)

- Exit Switch
- PIR Egress Sensor
- Exit Sense Bar
- Emergency Door Release



Exit Switch



Piezoelectric Exit Switch



Touchless Exit Switch



Egress Sensor



Non-Latching Pushbar



Emergency Door Release

### 4 Electric Power Transfer Devices (Pages 37-38)

- Required With Locksets & Exit Devices
- Electric Power Hinge
- Power Transfer Loop
- Concealed Power Transfer
- Electrified Roton



2-679-0621  
2-679-0623  
Power Transfer



ETW4-10  
Electric Hinges

### 5 Door Position Sensors (Pages 39-40)



2-679-0626  
Magnetic Switch

### 6 Power Supply & Door Controllers (Pages 41-49)

#### 2901

##### Power Supply

- Designed to operate exit devices equipped with electric latch retraction (ELR)

#### 2902

##### Power Supply

- Designed to operate exit devices equipped with electric latch retraction with day/night mode feature (ELR)

#### 2903

##### Power Supply

- Provides power for Fail Safe or Fail Secure locking devices
- 24 V output; 2 AMP capacity
- Filtered/regulated

#### 2904

##### Power Supply

- Provides power and control for openings with an electrified locking device and automatic door operator
- 24 V output; 2 AMP capacity
- Filtered/regulated

#### 2908

##### Power Supply

- Modular
- Provides power for Fail Safe or Fail Secure locking devices
- 12/24 V output; 1 AMP capacity
- Filtered/regulated



#### 2909

##### Power Supply

- Modular
- Provides power for Fail Safe or Fail Secure locking devices
- 12/24 V output; 2 AMP capacity
- Filtered/regulated



# Locking Devices



Hager offers a comprehensive product line of electronic locking devices ranging from strikes, delayed egress systems, and magnetic locks.

Electric door strikes allows for a range of functionality for any access control system. Ranging from an exterior door such as an employee entrance or an interior door such as a stairwell, Hager's electric strikes have a variety of universal features as well as factory configurations to accommodate a range of locksets, doors, frames, applications, and building codes.

Delayed egress systems are ideal for security, safety, and loss prevention applications. Many of Hager's delayed egress systems are installed in public facilities such as airports to control pedestrian traffic. Other Hager units are installed in brick and mortar retail stores to prevent theft while other installations include assisted living facilities to protect patients and childcare facilities to protect children.

Typically used on exit doors, when unauthorized egress is initiated when in the locked mode. The system delays egress through the door for 15 or 30 seconds (where approved). Meanwhile, the person exiting must wait while personnel or security respond. The door unlocks after 15 seconds has elapsed, permitting egress. A signal from the fire life safety system will release the lock for uninhibited egress in an emergency. Typical installations include airports, convention halls, wholesale stores, retail stores, long term care, drug and alcohol rehab, psychiatric care, infant nurseries, museums, art galleries, warehouses, and technological facilities.

Hager's magnetic locks are designed to be used on interior doors, perimeter exit doors, and entrances that require fail safe emergency release. Hager's magnetic locks have no moving parts and provides positive and instantaneous release, whether caused by a signal from the fire command center, remote control or access control.





## LOCKING DEVICES - 2925 ELECTRIC STRIKE

### MODELS

2925

4-7/8" (124 mm) faceplate for aluminum, wood, and hollow metal frames

### WARRANTY

One-year warranty

### APPLICATION

- Cylindrical locksets with up to 5/8" (15mm) throw latch bolts
- Access controlled ingress for fail secure or fail safe openings (field selectable)
- Economy option provides great performance and value

Latch:

1/2" (13 mm) [5/8" (16 mm) with 1/8" (3 mm) door gap]

### FEATURES

Components:

- Quick and easy installation with low profile 1-1/4" (32 mm) backset
- All stainless steel parts with durable diecast body for corrosion resistance
- Compact low profile design with internally mounted solenoid and factory supplied mounting tabs
- Non-handed (reversible)
- Latch status output (standard)



### ELECTRICAL SPECIFICATIONS

Input:

Current/Voltage 200/100 mA @ 12/24VDC (Field selectable)

Monitoring:

Latch Status (Std) SPDT, DRY 3A @ 30VDC

### MECHANICAL SPECIFICATIONS

Dimensions:

1-1/4" (32 mm) W x 4-7/8" (124 mm) H x 1-1/4" (32 mm) D

### ACCESSORIES

BUZZ

- Part no. 2-679-0028
- Plug-In Buzzer 12/24VDC
- Indicates fail secure strike is energized and unlocked

RECT

- Part no. 2-679-0029
- Converts AC to DC
- Wire leads

### FINISHES

US32D





## LOCKING DEVICES - 2928 MULTI-APPLICATION ELECTRIC STRIKE

### MODELS

2928-SC  
2928-RC  
2928-6R  
2928-7R

- 4-7/8" (124 mm) x 1-1/4" (32 mm) square corner faceplate
- 4-7/8" (124 mm) x 1-1/4" (32 mm) radius corner faceplate
- 6-7/8" (175 mm) x 1-1/4" (32 mm) radius corner faceplate
- 7-15/16" (202 mm) x 1-7/16" (36 mm) radius corner faceplate

### WARRANTY

One-year warranty

### APPLICATION

- Cylindrical and mortise locksets with up to 3/4" (19 mm) throw latch bolts with 1/8" door gap
- Access controlled ingress for fail secure or fail safe openings (field selectable)
- Field selectable voltage - 12/24V, AC/DC
- Ideal for medium traffic openings

Latch:

- 1/2" (13 mm)
- 5/8" (16 mm) with 1/8" (3 mm) door gap
- 3/4" (19 mm)

### FEATURES

Components:

- Quick and easy installation with low profile 1-3/16" backset
- Latch position status (standard)
- Keeper locked/unlocked status (standard)
- Keeper open/closed and status (optional)
- Compact low profile design with internally mounted solenoid and factory supplied mounting tabs
- Non-handed (reversible)
- 1/4" (6 mm) horizontal alignment adjustment
- All stainless steel parts with durable diecast body for corrosion resistance
- Fewer moving parts for maximum life
- Stainless steel is standard with square corner faceplates
- Aluminum standard with radius corner faceplate
- Plug in tail connectors

Certification:

- ANSI A156.31, Grade 2

### OPTIONS

KOC:

Keeper/open closed status

### ELECTRICAL SPECIFICATIONS

Inputs:

Current/Voltage

- 200/100 mA @ 12/24VDC
- 140/70 mA @ 12/24VAC

Monitoring:

Latch Status (Std.)

SPDT, Dry 3 A @ 30VDC

Keeper Locked

Status (Std.)

SPDT, Dry 3 A @ 30VDC

Keeper Open

Status (Opt.)

SPDT, Dry 3 A @ 30VDC

### MECHANICAL SPECIFICATIONS

Dimensions:

1-1/4" (32 mm) W x 4-7/8" (124 mm) H x 1-3/16" (30 mm) D

### ACCESSORIES

BUZZ

- Part no. 2-679-0028
- Plug-In Buzzer 12/24VDC
- Indicates fail secure strike is energized and unlocked

### FINISHES

- US32D (2928-SC only)
- ALM (standard with 2928-RC, 2928-6R, 2928-7R)





## LOCKING DEVICES - 2930 UNIVERSAL APPLICATION ELECTRIC STRIKE

### MODELS

2930-CYL  
2930-MOR  
2930-MDB

- For use with Grade 1 cylindrical locksets
- For use with Hager mortise locks
- For use with Hager mortise locks with deadbolt

### WARRANTY

One-year warranty

### APPLICATION

- Heavy duty electric strike
- Designed for installation in hollow metal frames with Grade 1 cylindrical and mortise locksets with up to 3/4" (19 mm) throw latch bolts and 1" deadbolts (25 mm)
- Designed for new construction and retrofit applications
- Field selectable fail safe or fail secure (default setting) with no disassembly
- For use on fire-rated and non fire-rated doors
- *Fail safe is not permitted on fire-rated doors*

### FEATURES

Components:

- Retrofits existing ANSI 4-7/8" (124 mm) strike prep - no centerline relocation
- Fail secure standard; field reversible to fail safe (no disassembly)
- Up to 3/4" (919 mm) latch bolt and 1" (25 mm) deadbolt
- Non-handed (reversible)
- 1/8" (3 mm) horizontal alignment adjustment
- Factory tested 2,500 lbs.
- Exceeded 1,000,000 cycles
- UL tested 1,500 lbs.
- 70 ft-lb dynamic strength
- Internally mounted solenoid, no heat in keeper
- Tamper resistant
- All stainless steel parts with durable diecast body for corrosion resistance
- Plug in tail connectors

Certification:

- ANSI A156.31 compliant, Grade 1
- UL - 1034 Burglary Resistant (interior use application)
- BP - 10254
- IL10C.3H Fire-Rated, 4' x 8' door
- NFPA 252
- CAN 4-5104 (Fail Secure Only)



### ELECTRICAL & MECHANICAL SPECIFICATIONS

Input:

Current/Voltage

600/300 mA @ 12/24V DC

Monitoring:

LBM (Opt.)

DSM (Opt.)

DBM (Opt.)

SPDT, Dry 5 A @ 30V DC

SPDT, Dry 5 A @ 30V DC

SPDT, Dry 5 A @ 30V DC (*Handed*)

### ACCESSORIES

BUZZ

- Part no. 2-679-0028
- Plug-In Buzzer 12/24 VDC
- Indicates fail secure strike is energized and unlocked

RECT

- Part no. 2-679-0029
- Converts AC to DC
- Wire leads

### FINISHES

US4, US10, US10B, US26,  
US26D, US32D (standard)

### OPTIONS

LBM

- Latch Bolt Monitor
- Door closed/latched or open/unlatched status
- Access control anti-tailgate/timer reset signal

DSM

- Door Secure Monitor (DSM)
- Door secure and unlocked monitoring
- Mantraps, interlocks, airlocks

DBM

- Deadbolt Monitoring (DBM - Handed)
- Signals deadbolt projected or retracted
- Occupied signal rooms/bathrooms
- Manual lockout of access control by deadbolt

### NOTES

Fire-Rated:

Not approved for fail safe operation on fire-rated doors

Handing:

- CYL, MOR with monitoring are non-handed
- DBM with monitoring is handed







## LOCKING DEVICES - DELAYED EGRESS

### MODELS

4501 DE/4601 DE  
2-679-0630

Delayed Egress Exit Device  
Delayed Egress Wall Mount Controller  
- *Must be ordered separately*



### WARRANTY

One-year warranty

### APPLICATION

- Control pedestrian traffic
  - *Airport & Public Facility Security and Safety*
  - *Loss Prevention*
- Wandering Patient and Infant Protection (Compatible with Hugs® and other patient tracking systems)
- Intended for single or double doors that require panic hardware

### FEATURES

Components:

- Alternating 85 db tone and voice message (75 db @ 3 feet)
  - *Voice and digital display provides informative annunciation for people without prior knowledge, including the blind and hearing impaired*
  - *Voice provides warning or safety message, countdown and time of door release*
  - *Digital countdown display indicated if the door was opened after lock release*
- 15 or 30 second egress delay
- 1 or 2 second nuisance delay
- Built-in function keypad provides alarm and lock reset, 1 to 30 second bypass, sustained bypass, and additional key switch
- Control inputs include 1 to 30 second request-to-exit and access bypass with anti-tailgate and alarm reset
- Field selectable trigger modes from exit device (N/O or N/C)
- Field selectable automatic or manual power up after emergency release or power loss

Built-In

Annunciation:

- Armed mode
- Nuisance mode
- Irreversible egress mode
- Release mode
- Digital countdown display
- Field selectable voice notification or tone
- Field selectable male voice with security message or female voice with safety message

Monitoring

Outputs:

- Armed status
- Egress initiation status
- Released status

Power Up Modes:

Field selectable automatic or manual power up after emergency release or power loss

Code Compliance:

- Use of manual power up complies with California Building Code (OSHPD) requirements
- International Fire Code (IFC) 1008.1.8.6 Delayed Egress Locks
- International Building Code (IBC) 1008.1.8.6 Delayed Egress Locks
- NFPA 101, Life Safety Code 7.2.1.6.1 Delayed Egress Lock
- NFPA 1 Uniform Fire Code
- California Building Code (CBC) 1008.1.8.6 Special Egress Control Devices

### ELECTRICAL SPECIFICATIONS

#### Inputs:

Voltage Input:

- Single 430mA @ 24VDC
- Tandem 680mA @ 24CVDC

Reset Input:

N/O, Dry contact

REX Input:

N/C, Dry contact

Trigger:

N/C, Dry contact





## LOCKING DEVICES - DELAYED EGRESS

### Monitoring Outputs:

Alarm output - 1 amp @ 30VDC SPDT, Dry  
Locked output - 1 amp @30VDC SPDT, Dry

### MONITORING

#### Alarm Output:

SPDT Dry, 1A @ 30 VDC, Dry

#### Locked Output:

SPDT Dry, 1A @ 30 VDC, Dry

### MECHANICAL SPECIFICATIONS

#### Controller

##### Dimensions:

6-1/2" (165 mm) W x 4-1/2" (114 mm) H x 1-1/2" (38 mm) D

#### Controller

##### Mounting:

Recessed or Surface Mount

### ACCESSORIES

2-679-0641

3-gang interior surface mount box

2-679-0642

Shroud for surface mount box

### FINISHES

#### Controller:

- Aluminum anodized (standard)
- Dark Bronze anodized
- Black anodized

### NOTES

- SVR exits must include rod covers
- Door position switch (DPS) is recommended for higher security. Contact Hager Tech Support for additional information.





## LOCKING DEVICES - 2958 INTEGRATED DELAYED EGRESS LOCK

### MODELS

|       |                                                            |
|-------|------------------------------------------------------------|
| 2958  | Single magnetic lock with 1650 lbs. holding force (748 kg) |
| 2985T | Tandem magnetic lock with 1650 lbs. holding force (748 kg) |

### WARRANTY

One-year warranty

### APPLICATION

- Control pedestrian traffic
  - Airport & Public Facility Security and Safety
  - Loss Prevention
- Wandering Patient and Infant Protection (Compatible with Hugs® and other patient tracking systems)
- Intended for single doors with latching or non-latching hardware
- Tandem model intended for use with pairs of doors with latching or non-latching hardware where activating the lock unlocks both doors



### FEATURES

#### Components:

- Field selectable voice and tone or tone only (75 db @ 3 feet)
  - Voice and digital display provides informative annunciation for people without prior knowledge, including the blind and hearing impaired
  - Voice provides warning or safety message, countdown and time of door release
  - Digital countdown display indicated if the door was opened after lock release
- Choice of 15 second exit and 1 second nuisance delay or field selectable 15 or 30 second exit delay and 1 or 2 second nuisance delay
- Field selectable security or safety message
- Field selectable activation
- Field selectable automatic or manual relock upon power up after emergency release
- Integrated 3 position key switch
  - Provides lock and alarm reset Manual power up sustained bypass, time bypass, adjustment for 1, 15, 20 or 30 seconds
- Field selectable door prop alarm
  - Alarm sounds when the door has been left open after selected bypass time has elapsed
- Anti-tailgate feature
- Alternating 85db tone and voice message

#### Control Inputs:

- Remote access control and REX input, field adjustable for 1, 15, 20, or 30 seconds
- Remote reset input
- Manual power-up input
- Emergency release input
- Anti-tailgate input

#### Monitoring

#### Outputs:

- Door secure and unlocked output
- Delayed egress activation alarm output

#### Certifications:

ANSI certified, ANSI Grade 1

#### Code Compliance:

- International Building Code (IBC) 1008.1.8.6 Delayed Egress Locks
- International Fire Code (IFC) 1008.1.8.6 Delayed Egress Locks
- NFPA 101, Life Safety Code 7.2.1.6.1 Delayed Egress Lock
- California Building Code (CBC) 1008.1.8.6 Special Egress Control Devices
- BOCA, National Building Code 1017.4.1.2 Special Locking Arrangements
- Chicago Building Code 10 (13-160-269) Electromagnetic Locking Devices
  - Certificate of approval available



## LOCKING DEVICES - 2958 INTEGRATED DELAYED EGRESS LOCK

### OPTIONS

|     |                      |
|-----|----------------------|
| DPS | Door Position Switch |
| MBS | Magnetic Bond Sensor |
| ATS | Anti-Tamper Switch   |

### RESET & CONTROL

|    |                                                           |
|----|-----------------------------------------------------------|
| PS | Built-in reset push switch, available with NFPA (NA) only |
| NS | Less key switch or push switch                            |

Input Voltage: Auto Sensing 12 to 24VDC

Current:  
2958 830mA @ 12VDC  
450mA @ 24VDC

2958T 1500mA @ 12VDC  
850mA @ 24VDC

Reset Input: N/O, Dry contact  
REX Input: N/O, Dry contact  
Trigger Input: N/O, Dry contact  
Fire Alarm Input: N/O, Dry contact

### MONITORING

Alarm Output: SPDT Dry, 1A @ 30VDC

Lock Secure  
Unlocked: SPDT Dry, 1A @ 30VDC

Door Position  
Switch: SPDT Dry, 250mA @ 30VDC

Magnetic Bond  
Sensor: SPDT Dry, 250 mA @ 30VDC

Anti-Tamper  
Switch: SPDT Dry, 1A @ 30VDC

### MECHANICAL SPECIFICATIONS

Dimensions:  
2958 11" (279 mm) W x 2-3/4" (70 mm) H x 2-5/8" (67 mm) D  
2958T Master 11" (279 mm) W x 2-3/4" (70 mm) H x 2-5/8" (67 mm) D  
2958T Slave 11" (279 mm) W x 2-3/4" (70 mm) H x 2-5/8" (67 mm) D  
Armature 7-3/8" (187 mm) W x 2-3/8" (60 mm) H x 9/16" (14 mm) D

### FINISHES

ALM Aluminum anodized (standard)  
DBZ Dark bronze anodized  
BLK Black anodized

### NOTES

Local Approval: All installations must be approved by the Authority Having Jurisdiction (AHJ)





## LOCKING DEVICES - 2941 MAGNETIC LOCK

**WARRANTY** | One-year warranty

**MODELS**  
2941 | 600 lbs. holding force (272 kg)

**APPLICATION** | For interior door traffic control where physical attack is not a concern

**FEATURES**  
Components:

- Designed for system integrators, distributors, installers, and building owners presently using low cost import or private label brand access control hardware
- Interlocking quick mount assembly
- Provides superior, less obtrusive appearance compared to stainless steel epoxy sealed magnetic locks
- Full monitoring is standard
- Door status, lock status and bi-color LED included
- Adjustable mounting bracket with choice of self-drilling and tapping mounting screws or machine screws
- Wire access chamber with terminal block
- Printed circuit board with voltage and current spike protection
- Instant release anti-residual magnetism circuit

Certification: | ANSI/BHMA A156.23 Grade 1, Compliant



### ELECTRICAL SPECIFICATIONS

**Input:**

Current/Voltage: | 500mA/250mA @ 12/24VDC (field selectable)

### MONITORING

Lock Status: | SPDT, Dry 2mA @ 30VDC

Door Status: | SPDT, Dry 500mA @ 30VDC

### ACCESSORIES

2-679-0101 | Top Jamb Kit  
2-679-0103 | Glass Armature Mounting Kit  
2-679-0106 | Angle Bracket (cut to fit 2941)  
2-679-0107 | Stop Filler Plate (field cut for 2941)  
2-679-0108 | Stop Filler Plate (field cut for 2941)

### MECHANICAL SPECIFICATIONS

Lock Dimensions: | 9-7/8" (251 mm) W x 2" (51 mm) H x 1" (25 mm) D

Armature  
Dimensions: | 7-5/16" (186 mm) W x 1-1/2" (38 mm) H x 1/2" (13 mm) D

**FINISHES** | Aluminum anodized



## LOCKING DEVICES - 2942 MAGNETIC LOCK

### MODELS

2942 1200 lbs. holding force (545 kg)

### WARRANTY

One-year warranty

### APPLICATION

For perimeter and interior door security and access control

### FEATURES

#### Components:

- Designed for system integrators, distributors, installers, and building owners presently using low cost import or private label brand access control hardware
- Interlocking quick mount assembly
- Provides superior, less obtrusive appearance compared to stainless steel epoxy sealed magnetic locks
- Full monitoring is standard
- Door status, lock status and bi-color LED included
- Adjustable mounting bracket with choice of self-drilling and tapping mounting screws or machine screws
- Wire access chamber with terminal block
- Printed circuit board with voltage and current spike protection
- Instant release anti-residual magnetism circuit



#### Certification:

ANSI/BHMA A156.23 Grade 1, Compliant

### ELECTRICAL SPECIFICATIONS

#### Input:

Current/Voltage: 500mA/250mA @ 12/24VDC (field selectable)

### MONITORING

Lock Status: SPDT, Dry 2mA @ 30VDC

Door Status: SPDT, Dry 500mA @ 30VDC

### ACCESSORIES

|            |                             |
|------------|-----------------------------|
| 2-679-0100 | Top Jamb Kit                |
| 2-679-0102 | Glass Armature Mounting Kit |
| 2-679-0106 | Angle Bracket               |
| 2-679-0107 | Stop Filler Plate           |
| 2-679-0108 | Stop Filler Plate           |

### MECHANICAL SPECIFICATIONS

Lock Dimensions: 10-1/2" (267 mm) W x 2-7/8" (73 mm) H x 1-5/8" (41 mm) D

Armature Dimensions: 7-5/16" (186 mm) W x 2-3/8" (60 mm) H x 1/2" (13 mm) D

### FINISHES

Aluminum anodized







## LOCKING DEVICES - 2941 AND 2942 ACCESSORIES

### TOP JAMB MOUNTING KITS FOR INSWING DOORS



#### **2-679-0100**

Top jamb kit for use with 2942

#### **2-679-0101**

Top jamb kit for use with 2941

### GLASS DOOR ARMATURE MOUNTING KITS



#### **2-679-0102**

Glass door kit for use with 2942

#### **2-679-0103**

Glass door kit for use with 2941



### TOP FILLER PLATES

Used where the frame stop does not provide enough mounting surface area for proper lock mounting.

#### **2-679-0107**

Stop filler plate for use with 2942

Cut for use with 2941

1/2" (h) x 10-1/2" (l) x 3/4" (d)

[12 (h) x 266 (l) x 19 (d) mm]

#### **2-679-0108**

Stop filler plate for use with 2942

Cut for use with 2941

3/4" (h) x 10-1/2" (l) x 3/4" (d)

[19 (h) x 266 (l) x 19 (d) mm]

### ANGLE BRACKETS



Used for the extension of a narrow frame header mounting surface, the bracket provides additional surface area for proper lock mounting.

#### **2-679-0106**

Angle bracket for use with 2942

cut for use with 2941

10-1/2" (l) x 1-1/2" (h) x 3/4" (d)

[266 (l) x 12 (h) x 19 (d) mm]



## LOCKING DEVICES - 2950 MAGNETIC LOCK

### MODELS

|      |                                                            |
|------|------------------------------------------------------------|
| 2951 | Single magnetic lock with 1650 lbs. holding force (748 kg) |
| 2952 | Double magnetic lock with 1650 lbs. holding force (748 kg) |
| 2953 | Single magnetic lock with 1200 lbs. holding force (545 kg) |
| 2954 | Double magnetic lock with 1200 lbs. holding force (545 kg) |

### WARRANTY

Lifetime warranty

### APPLICATION

For perimeter and interior door security and access control

### FEATURES

#### Components:

- Modular design
- Modular upgrade kits
- Field upgradeable without removal
- Uniform design and installation
- Identical housing, template, and accessories
- Quick mount assembly
- Compatible with any access control system
- Secure wiring and mounting screws with interlocking mounting plate

#### Certification:

ANSI/BHMA A156.23 Grade 1 Compliant

### OPTIONS

|      |                                                                                                                                      |
|------|--------------------------------------------------------------------------------------------------------------------------------------|
| Time | Built-in field adjustments 0-30 seconds re-lock delay                                                                                |
| DPS  | Door Position Switch indicates door open and door closed                                                                             |
| ATS  | Anti Tamper Switch indicates access cover removal                                                                                    |
| MBS  | Magnetic Board Sensor indicates locked and unlocked, low holding power, tampering and obstruction between armature and magnetic core |



### ELECTRICAL SPECIFICATIONS

#### Input:

##### Current/Voltage:

|      |                                      |
|------|--------------------------------------|
| 2951 | Auto Sensing 670mA/350mA @ 12/24 VDC |
| 2952 | Auto Sensing 1.34A /700mA @ 12/24VDC |
| 2953 | Auto Sensing 250mA/125mA @ 12/24VDC  |
| 2954 | Auto Sensing 500mA/250mA @ 12/24VDC  |

### MONITORING

|      |                        |
|------|------------------------|
| Time | SPDT, Dry 20mA @ 30VDC |
| DPS  | SPDT, Dry 20mA @ 30VDC |
| ATS  | SPDT, Dry 20mA @ 30VDC |
| MBS  | SPDT, Dry 20mA @ 30VDC |

### ACCESSORIES

|            |                      |
|------------|----------------------|
| 2-679-0109 | Timer Input Module   |
| 2-679-0110 | Door Position Sensor |
| 2-679-0111 | Magnetic Bond Sensor |
| 2-679-0112 | Anti-Tamper Switch   |

### MECHANICAL SPECIFICATIONS

|             |                                                       |
|-------------|-------------------------------------------------------|
| 2951 & 2953 |                                                       |
| Dimensions: | 11" (279 mm) W x 2-3/4" (70 mm) H x 1-9/16" (40 mm) D |
| 2952 & 2954 |                                                       |
| Dimensions: | 22" (559 mm) W x 2-3/4" (70 mm) H x 1-9/16" (40 mm) D |

### FINISHES

|     |                              |
|-----|------------------------------|
| ALM | Aluminum anodized (standard) |
| DBZ | Dark bronze anodized         |

### MOUNTING KITS

- Top Jamb Kit
- Glass Door Kit
- Universal Header Bracket
- Spacer Bracket
- Armature Mounting Plate with and without Sensor Door Coordinator Lock Mounting Kit
- Filler Plates
- Angle Brackets
- See Mounting Kits Reference File for complete list of all mounting kits and part number







## LOCKING DEVICES - 2950 SERIES ACCESSORIES

### MODULAR KITS

#### 2-679-0109

Timer Input Module  
Built-in field adjustable 0-30 seconds re-lock delay

#### 2-679-0110

Door Position Sensor  
Indicates door open and door closed

#### 2-679-0111

Magnetic Bond Sensor  
Indicates locked and unlocked, low holding power, tampering and obstruction between armature and magnetic core

#### 2-679-0112

Anti-Tamper Switch  
Indicates access cover removal.

### TOP JAMB MOUNTING KITS FOR INSWING DOORS



#### 2-679-0120

Top jamb kit for use with 2951 and 2953  
ALM

#### 2-679-0121

Top jamb kit for use with 2951 and 2953  
DBZ

#### 2-679-0130

Top jamb kit for use with 2952 and 2954  
ALM

#### 2-679-0131

Top jamb kit for use with 2952 and 2954  
DBZ

### GLASS DOOR ARMATURE MOUNTING KITS



#### 2-679-0160

Glass door kit for use with 2951 and 2953  
ALM

#### 2-679-0161

Glass door kit for use with 2951 and 2953  
DBZ

Note: For 2952 and 2954, order two (2) glass door armature mounting kits.

### UNIVERSAL HEADER BRACKET



Used in lieu of angle brackets, a universal header bracket provides a faster mounting solution, saving time and labor costs. Reduce potential for missized and misaligned mounting

holes, broken taps, removal of broken taps. Combined with interlocking easy mount assembly, save up to a half day's labor with the installation of 12 locks.

- Solid 1" (25 mm) bar provides higher security and superior aesthetics
- Machined wire chase provides concealed and secure wiring
- Multiple pre-drilled and tapped mounting holes to accommodate the use of several different locks on either 4" (102 mm) or 4-1/2" (114 mm) aluminum frames

#### 2-679-0180

For use with 2951 and 2953  
1 x 1 x 11 in (25 x 25 x 279 mm)  
ALM

#### 2-679-0181

For use with 2951 and 2953  
1 x 1 x 11 in (25 x 25 x 279 mm)  
DBZ

#### 2-679-0190

For use with 2952 and 2954  
1 x 1 x 22 in (25 x 25 x 559 mm)  
ALM

#### 2-679-0191

For use with 2952 and 2954  
1 x 1 x 22 in (25 x 25 x 559 mm)  
DBZ



## LOCKING DEVICES - 2950 SERIES ACCESSORIES

### SPACER BRACKETS



Aluminum frames with blade stop - lowers magnetic lock below blade stop. Concrete filled hollow metal frames - provides multiple points for concealed wire entry.

- Pre-drilled and tapped specifically for 2951 and 2952 magnetic locks
- Machined wire chase provides multiple points for concealed wire entry from concrete filled frames
- ALM (aluminum) finish

#### 2-679-0200

Bracket for 2951 and 2953  
1/2 x 1-1/2 x 11 in (13 x 38 x 279 mm)

#### 2-679-0201

Bracket for 2952 and 2954  
1/2 x 1-1/2 x 22 in (13 x 38 x 559 mm)

### ARMATURE MOUNTING PLATE

Armature mounting plates provide a solution for mounting magnetic locks to the top rail of aluminum, glass, wood, and hollow metal doors that do not permit the use of thru bolts.



#### 2-679-0204

Armature mounting plate

#### 2-679-0205

Armature mounting plate with sensor

Note: For 2952 and 2954, order two (2) armature mounting plates.

### FILLER PLATES

Filler plates are for extension of the stop to provide a proper mounting surface on the underside of the header. Available in Aluminum (ALM) or Dark Bronze (DBZ) finish. Contact Hager Tech Support for part numbers for additional finishes (including BRZ, BLK, US3, US4, US26, and US26D).



#### For 11" (279 mm) Single Magnetic Lock Models (2951/2953)

#### 2-679-0281

ALM  
1/8 x 1-1/4 in (3 x 32 mm)

#### 2-679-0283

DBZ  
1/8 x 1-1/4 in (3 x 32 mm)

#### 2-679-0291

ALM  
1/4 x 1-1/4 in (6 x 32 mm)

#### 2-679-0293

DBZ  
1/4 x 1-1/4 in (6 x 32 mm)

#### 2-679-0311

ALM  
1/2 x 1-1/4 in (13 x 32 mm)

#### 2-679-0313

DBZ  
1/2 x 1-1/4 in (13 x 32 mm)

#### 2-679-0321

ALM  
5/8 x 1-1/4 in (16 x 32 mm)

#### 2-679-0323

DBZ  
5/8 x 1-1/4 in (16 x 32 mm)

#### For 22" (559 mm) Double Magnetic Lock Models (2952/2954)

#### 2-679-0381

ALM  
1/8 x 1-1/4 in (3 x 32 mm)

#### 2-679-0383

DBZ  
1/8 x 1-1/4 in (3 x 32 mm)

#### 2-679-0391

ALM  
1/4 x 1-1/4 in (6 x 32 mm)

#### 2-679-0393

DBZ  
1/4 x 1-1/4 in (6 x 32 mm)

#### 2-679-0411

ALM  
1/2 x 1-1/4 in (13 x 32 mm)

#### 2-679-0413

DBZ  
1/2 x 1-1/4 in (13 x 32 mm)

#### 2-679-0421

ALM  
5/8 x 1-1/4 in (16 x 32 mm)

#### 2-679-0423

DBZ  
5/8 x 1-1/4 in (16 x 32 mm)





## LOCKING DEVICES - 2950 SERIES ACCESSORIES



### ANGLE BRACKETS

Angle brackets are used as extensions on shallow door frames to provide adequate mounting surface. Available in Aluminum (ALM) or Dark Bronze

(DBZ) finish. Contact Hager Tech Support for part numbers for additional finishes (including BRZ, BLK, US3, US4, US26, and US26D).

#### For 11" (279 mm) Single Magnetic Lock Models (2951/2953)

##### 2-679-0491

ALM

1-1/2 x 1-1/2 in (38 x 38 mm)

##### 2-679-0493

DBZ

1-1/2 x 1-1/2 in (38 x 38 mm)

##### 2-679-0501

ALM

2 x 1-1/2 in (51 x 38 mm)

##### 2-679-0503

DBZ

2 x 1-1/2 in (51 x 38 mm)

#### For 22" ( mm) Double Magnetic Lock Models (2952/2954)

##### 2-679-0571

ALM

1-1/2 x 1-1/2 in (38 x 38 mm)

##### 2-679-0573

DBZ

1-1/2 x 1-1/2 in (38 x 38 mm)

##### 2-679-0581

ALM

2 x 1-1/2 in (51 x 38 mm)

##### 2-679-0583

DBZ

2 x 1-1/2 in (51 x 38 mm)



### DOOR COORDINATOR LOCK MOUNTING KITS

##### 2-679-0210

Door coordinator lock mounting kit for use with 2951 and 2953  
ALM

##### 2-679-0220

Door coordinator lock mounting kit for use with 2952 and 2954  
DBZ



## LOCKING DEVICES - 2961 SERIES MAGNETIC SHEAR LOCK

### MODELS

2961 Single magnetic shear lock with 2000 lbs. holding force (907 kg)

### WARRANTY

One-year warranty

### APPLICATION

For commercial grade hollow metal and wood doors and frames and Herculite doors with top rails

### FEATURES

- Concealed, high security, Fail Safe locking mechanism
- Incorporates floating armature assembly and special alloy steel locking tabs on both lock and armature assemblies
- May be adjusted both vertically and laterally to compensate for wide door gaps and warped or misaligned doors

### Components:

- 2,000 lbs (907 kg) holding force without current inrush or high operating temperature
- 8" x 1-1/2" (203 mm x 38 mm) lock
- Integrated electronics
- 1-5/8" (41 mm) depth for 1-3/4" - 2" (44 mm - 51 mm) frames
- Armature supplied with lock (specify type required - ITC, FTC, or HTC)
- Door static sensor ensures door is at rest and aligned, before the magnet is permitted to energize (eliminates the potential for lock misalignment)
- Lateral adjustment of shear tabs to compensate for warped or misaligned doors, permitting accurate locking
- Vertical adjustment of both the armature and the adjustable delay relock sensor compensates for wide door gaps
- Unique floating action for easy armature lift when the magnet is energized and provides ability to overcome wide door gaps
- Alloy shear tabs ensure continued high holding force
- No profiling of the soft armature steel that may be prone to wear and reduced holding force
- Advanced electronic circuitry that incorporates door static, positioning and timed relock sensor and automatic voltage sensing for 12/24 VDC input
- Noise dampeners reduce the noise associated with locking and unlocking



### OPTIONS

- MBS**
- Bond sensor indicates proper armature contact or reduced holding power due to improper armature contact or tampering
  - SPDT 0.25 amp
- DPS**
- Door position switch indicates door open or closed
  - SPDT 0.25 amp maximum
- HTR**
- Herculite top rail armature adjustment bracket for leading edge adjustments

### ELECTRICAL SPECIFICATIONS

**Input:**  
Voltage: Auto Sensing 650/350 mA @ 12/24 VDC

### MONITORING

DPS SPDT, Dry 20mA @ 30VDC  
MBS SPDT, Dry 20mA @ 30VDC

### ACCESSORIES

2-679-0600 Wood door reinforcement box (sold separately)

### ARMATURES

ITC Armature Standard mounting armature kit for aluminum and hollow metal doors with 7/8" to 1-1/8" deep top channels, wood doors, and factory prepared hollow metal flush edge doors

FTC Armature Mounting kit for field prepared horizontal mounting in hollow metal doors with flush edge

HTC Armature Mounting kit for 1-15/16" deep Herculite channels

### MECHANICAL SPECIFICATIONS

Lock Dimensions: 8" (203 mm) W x 1-1/2" (38 mm) H x 1-5/8" (41 mm) D

Armature Dimensions: 8" (203 mm) W x 1-1/2" (38 mm) H x 7/8" (48 mm) D

### FINISHES

ALM Aluminum anodized (standard)





## LOCKING DEVICES - 2965 MAGNETIC SHEAR LOCK

### MODELS

2965

Single magnetic shear lock with 2700 lbs. holding force (1225 kg)

### WARRANTY

One-year warranty

### APPLICATION

For commercial grade hollow metal and wood doors and frames and Herculite doors with top rails

### FEATURES

- Concealed, high security, Fail Safe locking mechanism
- Incorporates floating armature assembly and special alloy steel locking tabs on both lock and armature assemblies
- May be adjusted both vertically and laterally to compensate for wide door gaps and warped or misaligned doors

### Components:

- 2,700 lbs (1225 kg) holding force without current inrush or high operating temperature
- 10-7/16" x 1-1/2" (265 mm x 38 mm) lock
- Integrated electronics
- 1-5/8" (41 mm) depth for 1-3/4" - 2" (44 mm - 51 mm) frames
- Armature supplied with lock (specify type required - ITC, FTC, or HTC)
- Door static sensor ensures door is at rest and aligned, before the magnet is permitted to energize (eliminates the potential for lock misalignment)
- Lateral adjustment of shear tabs to compensate for warped or misaligned doors, permitting accurate locking
- Vertical adjustment of both the armature and the adjustable delay relock sensor compensates for wide door gaps
- Unique floating action for easy armature lift when the magnet is energized and provides ability to overcome wide door gaps
- Alloy shear tabs ensure continued high holding force
- No profiling of the soft armature steel that may be prone to wear and reduced holding force
- Advanced electronic circuitry that incorporates door static, positioning and timed relock sensor and automatic voltage sensing for 12/24 VDC input
- Noise dampeners reduce the noise associated with locking and unlocking



### OPTIONS

MBS

- Bond sensor indicates proper armature contact or reduced holding power due to improper armature contact or tampering
- SPDT 0.25 amp

DPS

- Door position switch indicates door open or closed
- SPDT 0.25 amp maximum

HTR

Herculite top rail armature adjustment bracket for leading edge adjustments

### ELECTRICAL SPECIFICATIONS

#### Input:

Voltage:

Auto Sensing 800/400 mA @ 12/24 VDC

### MONITORING

MBS

SPDT, Dry 250mA @ 30VDC

DPS

SPDT, Dry 250mA @ 30VDC

### ACCESSORIES

2-679-0601

Wood door reinforcement box (sold separately)

### ARMATURES

ITC Armature

Standard mounting armature kit for aluminum and hollow metal doors with 7/8" to 1-1/8" deep top channels, wood doors, and factory prepared hollow metal flush edge doors

FTC Armature

Mounting kit for field prepared horizontal mounting in hollow metal doors with flush edge

HTC Armature

Mounting kit for 1-15/16" deep Herculite channels

### MECHANICAL SPECIFICATIONS

#### Lock Dimensions:

10-7/16" (265 mm) W x 1-1/2" (38 mm) H x 1-5/8" (41 mm) D

#### Armature

#### Dimensions:

11" (279 mm) W x 1-1/2" (38 mm) H x 7/8" (48 mm) D

### FINISHES

ALM

Aluminum anodized (standard)





# Access Controls



As the demand for access controls continue to grow, Hager Companies offers proven, reliable, and innovative solutions. While access control keypad devices are fairly definitive, customer requirements and building codes can vary. Hager Companies keypad product line offers solutions for these differing demands and requirements.

Key switches are ideal for a range of electrified openings such as an auditorium or gate operation that you might find near a hotel pool. With many different types of applications, key switches are an economical and viable devices in many installations.

Hager's line of heavy duty keypads has an array of ideal installations. The 2915 is perfect for secure areas such as a records archive room or server room. The 2916 and 2916P are ideal for outdoor installations such as college dormitories, apartment buildings, remote buildings, and office buildings.

Hager Companies provides proven and reliable products for the ever growing access control market. For more information, please visit the Hager Companies website at [www.hagerco.com](http://www.hagerco.com)







## ACCESS CONTROLS - 29KS KEY SWITCH

### MODELS

29KS | Key switch

### WARRANTY

One-year warranty

### APPLICATION

- Access control
- Automatic gate operation
- Alarm shunt
- Alarm reset
- Machine operation

### FEATURES

- Provides an economical method of providing authorized control for a variety of applications
- Choice of several contact configurations ensures compatibility with virtually any system
- Compatible with U.S. standard 1.125" and 1.25" mortise key cylinders and interchangeable core cylinders (not included)
- Compatibility with a new or existing facility mechanical key system is maintained
- Standard switch assemblies are single gang box mounted

### Components:

- Single gang, wall mounted, recessed key cylinder
- Tamper resistant, recessed cylinder
- Tamper resistant spanner screws
- Heavy duty all steel assembly
- 20 gauge stainless steel faceplate
- Large actuator for positive and consistent activation
- Compatible with 1.125" or 1.25" mortise cylinder (non included)

### Functions:

ASD | Alternate Action (on/off) SPDT  
MSD | Momentary SPDT  
ADD | Alternate Action (on/off) DPDT  
MDD | Momentary DPDT

### ELECTRICAL SPECIFICATIONS

Voltage: |

- 6 amp @ 30 VDC
- 7", 22 gauge wire leads

### OPTIONS

LEDG | One (1) green LED  
LEDR | One (1) red LED  
2LED | One (1) green and one (1) red LED

### CYLINDER

3902 | 1-1/8" recommended (order separately)  
3978 | Cam required (order separately)

### MECHANICAL SPECIFICATIONS

Dimensions: | 2-7/8" (73 mm) W x 4-1/2" (114 mm) H x 20 Gauge (0.912 mm)

### FINISHES

US32D

### NOTES

- Single switch assembly requires cloverleaf cam
- Dual switch assembly requires standard cam





## ACCESS CONTROLS - 2915 HEAVY DUTY KEYPAD

### MODELS

2915 Heavy Duty Keypad

### WARRANTY

One-year warranty

### APPLICATION

- Single gang indoor keypad
- Designed to control access of a single entry point for facilities with up to 500 users
- Each user assigned a personal identification number (PIN)

### FEATURES

#### Components:

- Blue backlit, moisture-resistant keypad
- 3/32" (2 mm) thick stainless steel faceplate
- 1/4" (6 mm) wall extrusion depth
- 500 users, 4-6 digit PIN codes
- 4 outputs, 2 relay and 2 solid status outputs timed or latching (on/off)
- Assign entry PINs to relays 1 and/or 2
- LED status: access, lockout
- Tactile audible key press, select volume
- Timed anti-passback
- Keypad tamper lockout
- Code activated timed entry PIN disable
- Request-to-exit/Enter input, egress keypad input
- Choice of door sense/relay inhibit input functions (forced entry, door ajar, inhibit relay 1 or 2, auto relock when door closes)
- Choice of 2 solid status output functions (alarm shunt, forced entry, door ajar, tamper lockout, keypad active)



### ELECTRICAL SPECIFICATIONS

#### Inputs:

Voltage: Auto Sensing 12 to 24 VAC/DC

Current: 30mA typical, 150 mA maximum

Operating Temperature: -20° to 130°F (-30° to 54°C)

Operating Humidity: 5 - 95% (non-condensing)

#### OUTPUTS

Relay 1 Form "C", 5 amps @ 28VDC

Relay 2

- Form "C", 2 amps @ 28VDC
- Switch to common outputs 3 & 4, 100 mA @ 30VDC

### MECHANICAL SPECIFICATIONS

Dimensions: 3" (76 mm) W x 4-3/4" (121 mm) H x 1-1/2" (38 mm) D

### FINISHES

US3, US4, US10B, US26, US32D



## ACCESS CONTROLS

### MODELS

|       |                   |
|-------|-------------------|
| 2916  | Heavy Duty Keypad |
| 2916P | Heavy Duty Keypad |

### WARRANTY

One-year warranty

### APPLICATION

- Surface mount indoor/outdoor keypad
- Designed to control access of a single entry point for facilities with up to 500 users
- Each user assigned a personal identification number (PIN)

### FEATURES

#### Components:

- Heavy cast vandal resistant housing
- Heavy cast metal blue backlit keys
- 500 users, 4-6 digit PIN codes
- 4 outputs, 2 relay and 2 solid status outputs timed or latching (on/off)
- Assign entry PINs to relays 1 and/or 2
- LED status: access, lockout
- Tactile audible key press, select volume
- Timed anti-passback
- Keypad tamper lockout
- Code activated timed entry PIN disable
- Request-to-exit/Enter input, egress keypad input
- Choice of door sense/relay inhibit input functions (forced entry, door ajar, inhibit relay 1 or 2, auto relock when door closes)



### ELECTRICAL SPECIFICATIONS

#### Inputs:

Voltage: Auto Sensing 12 to 24VAC/DC

Current: 30mA typical, 150mA maximum

Operating Temperature: -20° to 130°F (-30° to 54°C)

Operating Humidity: 5 - 95% (non-condensing)

#### OUTPUTS

Relay 1 Form "C", 5 amps @ 28VDC  
Relay 2 Form "C", 2 amps @ 28VDC  
Switch to common outputs 3 & 4, 100mA @ 30VDC

### MECHANICAL SPECIFICATIONS

Dimensions: 3" (76 mm) W x 5-3/4" (146 mm) H x 1-7/16" (37 mm) D

### ACCESSORIES

2-679-0669 Protective Shroud

### FINISHES

US32D





## ACCESS CONTROLS - 2-679-0708 UNDER DESK PUSH SWITCH

**MODELS**

2-679-0708 | Under Desk Switch

**WARRANTY**

| One-year warranty

**APPLICATION**

| Enables the remote control of doors equipped with electric locks and access controls

**FEATURES**

Components: | Mounts to the underside of a desk for remote door control

**ELECTRICAL SPECIFICATIONS**

| Momentary push switch

**MECHANICAL SPECIFICATIONS**

Dimensions: | 1" (25 mm) W x 2-1/4" (57 mm) H x 2-1/2" (63 mm) D





# Egress Devices



Just as important as access controls are egress controls. With fail secure openings, egress controls send a signal to unlock the locking device. With low energy automatic operators, knowing acts are needed to send signals to the power operator. These are all essential functions to an electrified opening. Hager Companies provides a wide range of egress controls that will satisfy your customers while being easy to install.





## EGRESS DEVICES - 2972 EXIT SWITCH

### MODELS

|        |                                                                 |
|--------|-----------------------------------------------------------------|
| 2972-M | Momentary SPDT Exit Switch                                      |
| 2972-T | Integrated electric timer (adjustable 1-60 seconds) exit switch |

### WARRANTY

One-year warranty

### APPLICATION

- 2" (50 mm) illuminated switch button for easy activation
- High impact resistant material stands up to abuse
- "Push to Exit" sign complies with NFPA requirements
- Blue illuminate button designed for access and egress applications for the disabled

### OPTIONS

|      |                                   |
|------|-----------------------------------|
| LEDG | One (1) green LED                 |
| LEDR | One (1) red LED                   |
| 2LED | One (1) green and one (1) red LED |
| BLU  | Disabled access button            |

### ELECTRICAL SPECIFICATIONS

|            |                        |
|------------|------------------------|
| 2972M      | SPDT, 5A @ 30 VDC      |
| 2972T      | SPDT, 2A @ 12/24VDC    |
| Wire Leads | 6" (152 mm) - 20 gauge |

### MECHANICAL SPECIFICATIONS

|             |                                      |
|-------------|--------------------------------------|
|             | 1 Gang                               |
| Dimensions: | 2-7/8" (73 mm) W x 4-1/2" (114 mm) H |
| FINISHES    | US32D                                |







## EGRESS DEVICES - 2973 CODE COMPLIANT EXIT SWITCH

### MODELS

2973 | Code Compliant Exit Switch with integrated timer (fixed 30 seconds)

### WARRANTY

One-year warranty

### APPLICATION

- Code compliant manual releasing devices and sensors
- Switch and sensor used together comply with manual releasing device and sensor device requirements for access controlled egress doors

### Certification:

- 2006 IBC 1008.1.3.4
- 2012 IBC 1008.1.9.8
- NFPA 7.2.1.6.2
- IFC 1008.1.3.4
- California Fire Code

### OPTIONS

LEDG | One (1) green LED  
 LEDR | One (1) red LED  
 2LED | One (1) green and one (1) red LED

### ELECTRICAL SPECIFICATIONS

Output: | SPDT, 5A @ 30 VDC  
 Wire Leads | 6" (152 mm) - 20 gauge

### MECHANICAL SPECIFICATIONS

Dimensions: | 1 Gang  
 2-7/8" (73 mm) W x 4-1/2" (114 mm) H

### FINISHES

US32D





## EGRESS DEVICES - PIR EGRESS SENSOR

### MODELS

2-679-0611

White PIR egress sensor

2-679-0612

Black PIR egress sensor

### WARRANTY

One-year warranty

### APPLICATION

- Access control system unit
- Unlocks doors automatically when persons approaching door are detected
- Complies with national fire and building code requirements for access controlled egress doors
- Code compliant Fail Safe mode releases locks when power to PIR sensor is interrupted

Certification:

UL Listed 294



### ELECTRICAL SPECIFICATIONS

Input:

12 or 24 VAC/DC @ 26 mA max

Output:

2 SPDT dry, 2 amp @ 30VDC

Operating

Temperature:

-20° to 120°F (-30° to 49°C)

### MECHANICAL SPECIFICATIONS

Dimensions:

1-1/2" (38 mm) W x 6-1/4" (159 mm) H x 1-1/2 (38 mm) D





## EGRESS DEVICES - 2977 PIEZOELECTRIC EXIT SWITCH

### MODELS

2977 | Stainless Steel Piezoelectric Request-to-Exit Switch

### WARRANTY

One-year warranty

### APPLICATION

- Designed for indoor, outdoor, commercial, and industrial egress applications
- Ideal for harsh or high traffic conditions

### FEATURES

#### Components:

- Vandal and weather resistant
- - 3/32" (2 mm) stainless steel vandal resistant faceplate
- No moving parts
- Selectable bi-color illumination status (Relay OFF - red or green) (Relay ON - red or green)
- Adjustable timer output, 1-30 seconds
- Superior performance in virtually any environment
- Can be used to control an automatic door, electromechanical lock, strike, or magnetic lock
- May be tied into the remote bypass (request-to-exit) input of an access control system
- Can be used to shunt an alarm system to allow egress from a secure area



### ELECTRICAL SPECIFICATIONS

|                        |                                                                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input:                 | 12/24 AC/DC                                                                                                                                              |
| Current:               | Idle - 30 mA<br>Active - 150 mA                                                                                                                          |
| Output:                | SPDT dry contact, 3 amp @ 30 VDC                                                                                                                         |
| Operating Temperature: | -40° to 160°F (-40° to 71°C)                                                                                                                             |
| Relay:                 | <ul style="list-style-type: none"> <li>• 100,000 cycles @ 3 A 30 VDC life expectancy</li> <li>• 200,000 cycles @ 1.5 A 30 VDC life expectancy</li> </ul> |

### MECHANICAL SPECIFICATIONS

|                |                                  |
|----------------|----------------------------------|
| Button Switch: | 1 billion cycle life expectancy  |
| Dimensions:    | 3" (76 mm) W x 4-3/4" (121 mm) H |

### FINISHES

US32D



## EGRESS DEVICES - 2978 TOUCHLESS EXIT SWITCH

### MODELS

2978 | Touchless Exit Switch

### WARRANTY

One-year warranty

### APPLICATION

- Designed to control electric locks/strikes, magnetic locks, or automatic door operators
- No touch wave-to-exit switch
- Active with wave of the hand
- For sanitary entry/exit applications

### FEATURES

Components:

- Bi-color status illumination
- Quick connect screwless terminal block for easy installation
- No moving parts
- Uses infrared sensor technology



### ELECTRICAL SPECIFICATIONS

Current: 

- 30 mA standby; 70 mA Active @ 12 VDC
- 15 mA standby; 35 mA Active @ 24 VDC

Output: DPDT, 3 amp dry contact

Activation Time: 1 second or as long as sensor is triggered

LED Color: Standby - red; Active - green

Range: 4" (10 cm)

### MECHANICAL SPECIFICATIONS

Dimensions: 2-3/4" (70 mm) W x 4-1/2" (114 mm) H

### FINISHES

US32D





## EGRESS DEVICES - 4801 NON-LATCHING PRESSURE SENSE PUSH BAR

### MODELS

4801

The Sure Exit is a non-latching, heavy duty, request-to-exit push bar that will activate the 2958 & 2958T when slight pressure is applied to the bar.



### WARRANTY

One-year warranty

### FEATURES

Components:

- Magnetic lock release
- Access control request-to-exit
- Delayed egress trigger
- Alarm shunt
- CCTV or alarm activation
- Tri-Failsafe
  - a third redundant micro switch is automatically activated to release the door if both sensors or electronics fail
- No moving parts, quick, and quiet operation
- Human touch not required
- Sensor calibration not required
- Field installed green sign with 1" letters
- Heavy duty construction
- Narrow, low profile
- Two outputs
  - two dry contacts for lock release, request-to-exit, alarm shunt, alarm activation, CCTV activation
- Armored power loop
  - 18" flex stainless conduit

### ELECTRICAL SPECIFICATIONS

|                        |                                               |
|------------------------|-----------------------------------------------|
| Voltage Input:         | 12/24 VDC $\pm 10\%$<br>- no field adjustment |
| Current Input:         | 20 mA @ rest, 115 mA active                   |
| Output:                | Two, SPDT Dry, 3 Amp @ 28 VDC                 |
| Operating Temperature: | 0° to 150° F (-18° to 66° C)                  |

### MECHANICAL SPECIFICATIONS

|                   |                                                                                                                        |
|-------------------|------------------------------------------------------------------------------------------------------------------------|
| Activation Force: | <ul style="list-style-type: none"> <li>• 5 lbs. (2.2 kg)</li> <li>• Field adjustable up to 15 lbs. (6.8 kg)</li> </ul> |
| Dimensions:       | 2-3/8" (60 mm) W x 36" (914 mm) H x 1-7/8" (48 mm) D                                                                   |

### OPTIONS

- 42" (1,067 mm) wide doors
- 48" (1,219 mm) wide doors

### FINISHES

|     |                   |
|-----|-------------------|
| ALM | Aluminum anodized |
| BLK | Black anodized    |

### NOTES

|         |                       |
|---------|-----------------------|
| Length: | Bars may be field cut |
|---------|-----------------------|



## EGRESS DEVICES - 2-679-0650 EMERGENCY DOOR RELEASE

### MODELS

2-679-0650 | Break glass emergency door release 3V-28 VDC, 18 mA with siren (blue)

### WARRANTY

One-year warranty

### APPLICATION

- Breakable glass emergency door release with siren
- Ideal for immediate unlocking of doors that are equipped with fail safe electric locks and may influence approval of an electronic lock system
- Built-in alarm may be used as a local door annunciator

### FEATURES

Components:

- Remote monitoring
- CCTV activation or alarm activation
- Single gang box mounted
- Two replacement glass plates included

### ELECTRICAL SPECIFICATIONS

Output: | DPDT dry contact, 10 amp @ 28VDC

### MECHANICAL SPECIFICATIONS

Dimensions: | 5-1/2" (140 mm) W x 3-1/2" (90 mm) H x 1-3/8" (35 mm) D



# Electric Power Transfer Devices



Electrified cylindrical locks, mortise locks, and exit devices all require power provided to them. The most effective way to do this is to run power through the middle of the door. With Hager, you can select the hinge type that you need and that your customer wants and know that all of those products can be electrified. Stay with the proven name in hinges – Hager. Since 1849, Hager has been manufacturing hinges in the U.S. and as we continue to build on our rich history, we will continue to bring our customers reliability, value, and peace of mind. Whether you need electrified conventional hinges, electrified geared Roton hinges, concealed power transfers or a transfer loop, knowing that you chose Hager as your preferred hinge brand will prove to be a wise decision.







## ELECTRIC POWER TRANSFER DEVICES - HEAVY DUTY



### 2-679-0620

#### Concealed Mortise Mount Power Transfer Loop

- Frame mortised steel dust box with flexible steel loop and chrome finish
- Recommended for use with hollow metal frames
- UL Listed
- 11-1/2 (h) x 1 (w) x 3/4 in (d)  
(292 (h) x 25 (w) x 19 (d) mm)

- Provides a concealed and secure means of transferring electric lock and exit device power and signal wires from the frame to the door
- Completely concealed when the door is closed
- Ideal for heavy traffic and applications requiring higher security to inhibit tampering and abuse

### MODELS

#### 2 conductor

Two (2) 18 ga. wires, 5 amp @ 12/24 V AC/DC

#### **2-679-0621**

Aluminum powder coat (US28 equivalent)

#### **2-679-0622**

Dark brown powder coat (US10B equivalent)

#### 10 conductor

Ten (10) 24 ga. wires, 1 amp @ 12/24 V AC/DC

#### **2-679-0623**

Aluminum powder coat (US28 equivalent)

#### **2-679-0624**

Dark brown powder coat (US10B equivalent)

### FEATURES

- Power control, input for electric locks and exit devices, locked, latched, mantrap, forced entry, open status signal wiring
- Mortise door and frame installation
- PTM is completely concealed when the door is closed
- All metal design with stainless steel tubular wire transfer and heavy cast housing with steel back boxes provide weather and tamper resistance when door is open or closed
- Fasteners for wood, steel, and aluminum doors and frames included
- UL Listed Miscellaneous Fire Door Accessories
- UL 10C Listed for up to 3-hours on fire-rated doors and frames
- Classified according to Uniform Building Code (UBC) Standard 7-2, Fire Test of Door Assemblies (1997)



### COMPATIBLE OPENINGS

- 1-3/4" (44 mm) thick doors
- 0-180° opening swing with up to 3/4" (19 mm) offset pivots
- 0-180° opening swing with up to 5" wide butt hinges
- 0-130° opening swing with up to 5-1/2" (140 mm) wide butt hinges
- 0-130° opening swing with up to 6" (152 mm) wide butt hinges
- Not compatible with center hung doors, swing clear hinges, pocket pivots, butt hinges larger than 6" (152 mm), and 1-1/2" (38 mm) offset pivots

### DIMENSIONS

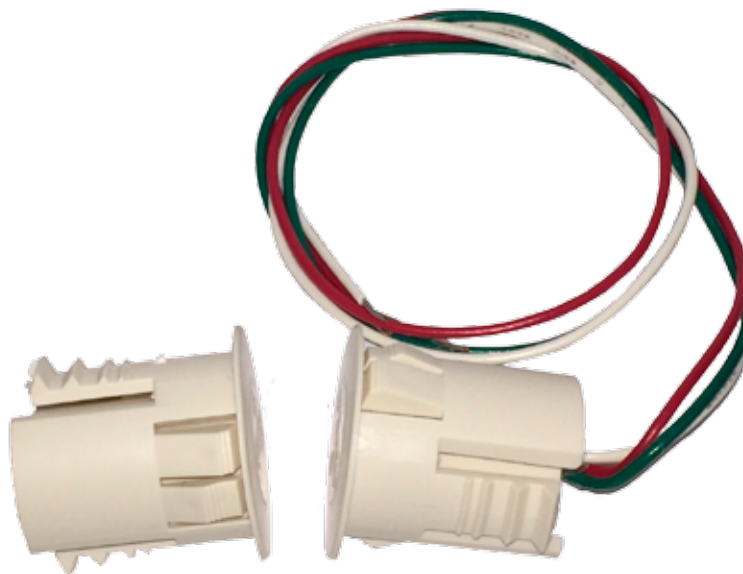
9" (h) x 1-1/4" (w) x 1-5/8" (d)  
229 mm (h) x 32 mm (w) x 41 mm (d)



# Door Position Sensors



Monitoring the position of the door is crucial security. Hager Companies offers a mortise style door position sensor for new installations. We also offer a drill-in style to make retrofitting an opening quick and easy.





## DOOR POSITION SENSORS

### MODELS

2-679-0625 | Concealed Magnetic Contact Switch

### WARRANTY

One-year warranty

### APPLICATION

Installed in the mortise of a hollow metal or aluminum frame and wood, hollow metal or aluminum door

### ELECTRICAL SPECIFICATIONS

Contact: | SPDT, 50mA @ 30 VDC

### MECHANICAL SPECIFICATIONS

Gap: | 0.125" (3 mm)

Faceplate: |

- 4.875" (h) x 1.25" (w) x 0.125" (d)
- 123.83 mm (h) x 31.75 mm (w) x 3.18 mm (d)



### MODELS

2-679-0626 | Magnetic Switch

### WARRANTY

One-year warranty

### APPLICATION

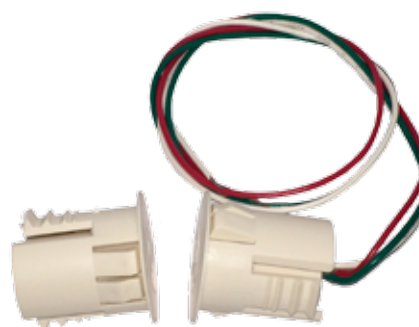
- Ideal for door status monitoring
- Easily installed in hollow metal and aluminum doors and frames

### ELECTRICAL SPECIFICATIONS

Contact: | SPDT, 50mA @ 30 VDC

### MECHANICAL SPECIFICATIONS

Gap: | 0.5" (12.7 mm)



# Power Supply & Door Controllers



The functionality of power supplies differ based on the electrified components and their intended use. In order to have an optimized and properly operational electrified opening, the power supply should fit the opening, not the other way around. Hager offers different power supply solutions for different types of openings.

The 2901 and 2902 are specifically designed to operate electric latch retraction exit devices.

The 2903 is designed to optimize the functionality of Fail Safe or Fail Secure locking devices that interface with the building's alarm controls, card readers, keypads, and other access control systems.

The 2904 is designed to optimize openings that include a locking device and automatic door operator.

The 2908 and 2909 are modular designs that provide functionality for any type of opening whether it is an electric latch retraction exit device, locking devices that interface with other access controls, door operators with sequencing locking devices, or combination of all of those or just something completely different.





## POWER SUPPLY & DOOR CONTROLLERS - 2909

### MODELS

2909 | 2A Modular Access Control Power Supply

### WARRANTY

One-year warranty

### APPLICATION

- Modular design allows customization of each power supply
- Regulated modular access control power supply
- Equipped with a high performance transformer and highly reliable electronic components
- Filtering and output voltage regulation provide protection and ensure the longevity of all system components

### FEATURES

#### Components:

- Output filtering stabilizes the DC output voltage and eliminates AC line noise
- Regulator maintains output voltage at 12 or 24 VDC regardless of load changes and battery charging
- Fire alarm input that provides simultaneous release of all Fail Safe/Fail Secure locks and door holders in case of an emergency
  - *Provides simultaneous release of all Fail Safe/Fail Secure locks and door holder in case of emergency*
- Circuit breaker protected AC input voltage - secondary output is PTC protected
- LED status indicators separate PTC protected charging output
- Optional dual 12 VDC or 24 VDC outputs



### ELECTRICAL SPECIFICATIONS

Input: 

- 800mA @ 115 VAC, 50/60Hz
- 230 VAC optional

Output: 

- 12/24 VDC, 2A
- *field selectable*
- Class 2

Battery Charger: 13.5/27 VDC, 500 mA

### LED INDICATORS

Amber: AC and DC voltages are OK  
Green: No DC output  
Red: No AC input, powered by batteries

### MECHANICAL SPECIFICATIONS

Dimensions: 

- 4" (102 mm) W x 12" (305 mm) H x 12" (305 mm) D
- 12 gauge steel

### NOTES

ELR 

- Not suitable for use with solenoid actuated Electric Latch Retraction (ELR) exit devices
- Suitable for motor driven ELR exit devices





## POWER SUPPLY & DOOR CONTROLLERS - 2908

### MODELS

2908 | 1A Modular Access Control Power Supply

### WARRANTY

One-year warranty

### APPLICATION

- Modular design allows customization of each power supply
- Regulated modular access control power supply
- Equipped with a high performance transformer and highly reliable electronic components
- Filtering and output voltage regulation provide protection and ensure the longevity of all system components

### FEATURES

Components:

- Fire alarm input
- *Provides simultaneous release of all Fail Safe/Fail Secure locks and door holder in case of emergency*
- Circuit breaker protected AC input voltage - secondary output and battery backup status
- Separate PTC protected charging output
- Optional dual 12 VDC or 24 VDC outputs
- Standard California compliant manual release



### ELECTRICAL SPECIFICATIONS

Input:

- 600mA @ 115 VAC, 50/60Hz
- 230 VAC optional

Output:

- 12/24 VDC, 1A
- *Field selectable*

Battery Charger: 13.5/27 VDC, 500 mA

### MECHANICAL SPECIFICATIONS

Dimensions:

- 4" (102 mm) W x 12" (305 mm) H x 12" (305 mm) D
- 12 gauge steel

### ACCESSORIES

2-679-0661

- 5 Amp hour battery backup
- *Uses a separate, protected output for charging - includes a low battery disconnect that protects the battery from potential damage during extended battery powered situations*
- *When multiple batteries are used, install in parallel to increase current, or install in series to increase voltage. For more information, please contact Hager Tech Support.*

2-679-0662

- 12 VDC Output Regulator Module
- *Enables dual 12V and 24V output*

2-679-0664

- Universal Relay Module
- *Multiple field selectable operational modes for up to two door stations*

### NOTES

ELR

- Not suitable for use with solenoid actuated Electric Latch Retraction (ELR) exit devices
- Suitable for motor driven ELR exit devices





## POWER SUPPLY & DOOR CONTROLLERS - 2908 & 2909 MODULES

### MODELS

2-679-0661 | 5 Amp hour battery backup

### WARRANTY

One-year warranty

### APPLICATION

Allows continued operation of your access controlled opening upon power failure

### MODELS

2-679-0662 | 12 VDC Output Regulator Module

### WARRANTY

One-year warranty

### APPLICATION

Allows for dual voltage output applications where openings require a 12VDC and 24VDC

### ELECTRICAL SPECIFICATIONS

Input: | 24 VDC

Output: | 500A @12 VDC

### MODELS

2-679-0664 | Universal Relay Module

### WARRANTY

One-year warranty

### APPLICATION

- Conventional Relay (CR)
- Dual Conventional Relay (2x CR)
- Time Delay Relay (TD) (1-60sec)
- Dual Time Delay Relay (2x TD) (1-60sec)
- Latching Relay (LR) - Separate Latch and Release Inputs
- Dual Latching Relay (2x LR) Pulse on Pulse off
- Time Delay x Latching Relay
- Interlock A (Air Lock)
- Interlock B (2 Modules Required)

### ELECTRICAL SPECIFICATIONS

Input: | 120/175mA @ 12/24 VDC

Output: | 2 each field selectable wet or dry

Wet | 120/175mA@ 12/24 VDC

Dry | SPDT, Dry 10A @ 30 VDC

### MODELS

2-679-0703 | Electric Latch Retraction Sequencer Module

### WARRANTY

One-year warranty

### APPLICATION

Allow for sequencing of electrified hardware on openings with Auto Operator

### ELECTRICAL SPECIFICATIONS

Input: | 12 VDC or 24 VDC (+/- 10%) - 140 mA max

Exit & Operator  
Contacts: | N/C or N/O, field selectable 10 AMP @ 30 VDC (Resistive)

Access Control  
Inputs: | N/O Dry Contact







## POWER SUPPLY & DOOR CONTROLLERS - 2908 & 2909 MODULES

### MODELS

2-679-0704 | Access Control Module

### WARRANTY

One-year warranty

### APPLICATION

Installer friendly relay board used to control and monitor openings

### ELECTRICAL SPECIFICATIONS

#### Input:

- 75mA@ 12/24 VDC
- 3 - N/C Normally Closed Inputs
- 3 - N/O Normally Open Inputs

#### Output:

- 5 Amp (Resistive) fail safe lock output
- 5 Amp (Resistive) fail secure lock output
- Lock status: SPDT (Form C) dry contact

### MODELS

2-679-0705 | 16 Amp Power Boost Module

### WARRANTY

One-year warranty

### APPLICATION

Used for electric latch retraction exit devices that require 24 VDC with 16 amp inrush

### ELECTRICAL SPECIFICATIONS

#### Input:

- 85mA @ 24 VDC
- Dry N/O trigger input ONLY

#### Output:

- 16A surge
- 1A continuous

#### Note:

**Works with Hager 2909 Power Supply**

### MODELS

2-679-0706 | Power Supply Monitor Module

### WARRANTY

One-year warranty

### APPLICATION

Provides outputs to monitor Hager 2909 power supply status and A/C power and DC output/battery status

### ELECTRICAL SPECIFICATIONS

- 2 SPDT 1 amp relay outputs
- On/off status

#### Note:

**Works with Hager 2909 Power Supply ONLY**



## POWER SUPPLY & DOOR CONTROLLERS - 2904

### MODELS

2904 | MLR & Auto Operator Access Control Power Supply

### WARRANTY

One-year warranty

### APPLICATION

Provides power and control for openings with an electrified locking device and automatic door operator

### FEATURES

Components:

- Filtered and regulated 24 VDC output
- 2A load capacity
- Class 2 rated outputs
- Overload, over voltage, and short circuit protection
- Automatically accepts 120 or 240 VAC input
- Built in fail safe or fail secure locking device controller
- Built in dry contact output for automatic door operator input
- Auxiliary 24 VDC constant voltage output (1 amp max output)
- Separate input for activation switch on entry and exit side of opening
- Fire alarm input
- Adjustable time delay



### ELECTRICAL SPECIFICATIONS

Input: 900mA @ 120 VAC, 60Hz  
600mA @ 240 VAC, 50/60Hz

Output: 24 VDC, 2A

### MECHANICAL SPECIFICATIONS

Dimensions: 4-1/4" (108 mm) W x 10-1/4" (260 mm) H x 10-1/4" (260 mm) D

### NOTES

- ELR
- Not suitable for use with solenoid actuated Electric Latch Retraction (ELR) exit devices
  - Suitable for motor driven ELR exit devices





## POWER SUPPLY & DOOR CONTROLLERS - 2903

### MODELS

2903 | Access Control & Locking Device Power Supply

### WARRANTY

One-year warranty

### APPLICATION

For use with Fail Safe and Fail Secure locking devices that interface with building alarm controls, card readers, keypads, and other door controls

### FEATURES

#### Components:

- Filtered and regulated 24 VDC output
- 2A load capacity
- Class 2 rated outputs
- Overload, over voltage, and short circuit protection
- Automatically accepts 120 or 240 VAC input
- Built in fail safe or fail secure locking device controller
- Surge suppression on fail safe and fail secure outputs
- Interface relay isolates locking device outputs from control switch
- Adjustable time delay



### ELECTRICAL SPECIFICATIONS

#### Input:

- 900mA @ 120 VAC, 60Hz
- 600mA @ 240 VAC, 50/60Hz

#### Output:

24 VDC, 2A

### MECHANICAL SPECIFICATIONS

#### Dimensions:

4-1/4" (108 mm) W x 10-1/4" (260 mm) H x 10-1/4" (260 mm) D

### NOTES

#### ELR

- Not suitable for use with solenoid actuated Electric Latch Retraction (ELR) exit devices
- Suitable for motor driven ELR exit devices



## POWER SUPPLY & DOOR CONTROLLERS - 2902

### MODELS

2902 | Electric Latch Retraction Controller & Power Supply with Day/Night Mode

### WARRANTY

One-year warranty

### APPLICATION

For use with Hager's 4500 Series Electric Latch Retraction (ELR) exit devices in a day/night mode of operation

### FEATURES

Components:

- Auxiliary 12 and 24 VDC outputs
- Built-in dry contact output for automatic door operator input
- Adjustable time delay
- Fire alarm input
- Operator day/night mode of operation

### ELECTRICAL SPECIFICATIONS

Input: | 750mA @ 120 VAC; 60Hz

Output: |

- 250mA @ 12.6-16.5 VDC; Unregulated & Unfiltered
- 250mA @ 26.7-28.0 VDC; Unregulated & Unfiltered

### MECHANICAL SPECIFICATIONS

Dimensions: | 4-1/4" (108 mm) W x 10-1/4" (260 mm) H x 10-1/4" (260 mm) D





## POWER SUPPLY & DOOR CONTROLLERS - 2901

### MODELS

2901 | Electric Latch Retraction Controller & Power Supply

### WARRANTY

One-Year Warranty

### APPLICATION

For use with Hager's 4500 Series Electric Latch Retraction (ELR) exit devices

### FEATURES

Components:

- Auxiliary 12 and 24 VDC outputs
- Built-in— dry contact output for automatic door operator input
- Adjustable time delay
- Fire alarm input
- Single or dual system latch retraction



### ELECTRICAL SPECIFICATIONS

Input: | 750mA @ 120 VAC; 60Hz

Output: |

- 250mA @ 12.6-16.5 VDC; Unregulated & Unfiltered
- 250mA @ 26.7-28.0 VDC; Unregulated & Unfiltered

### MECHANICAL SPECIFICATIONS

Dimensions: | 4-1/4" (108 mm) W x 10-1/4" (260 mm) H x 10-1/4" (260 mm) D

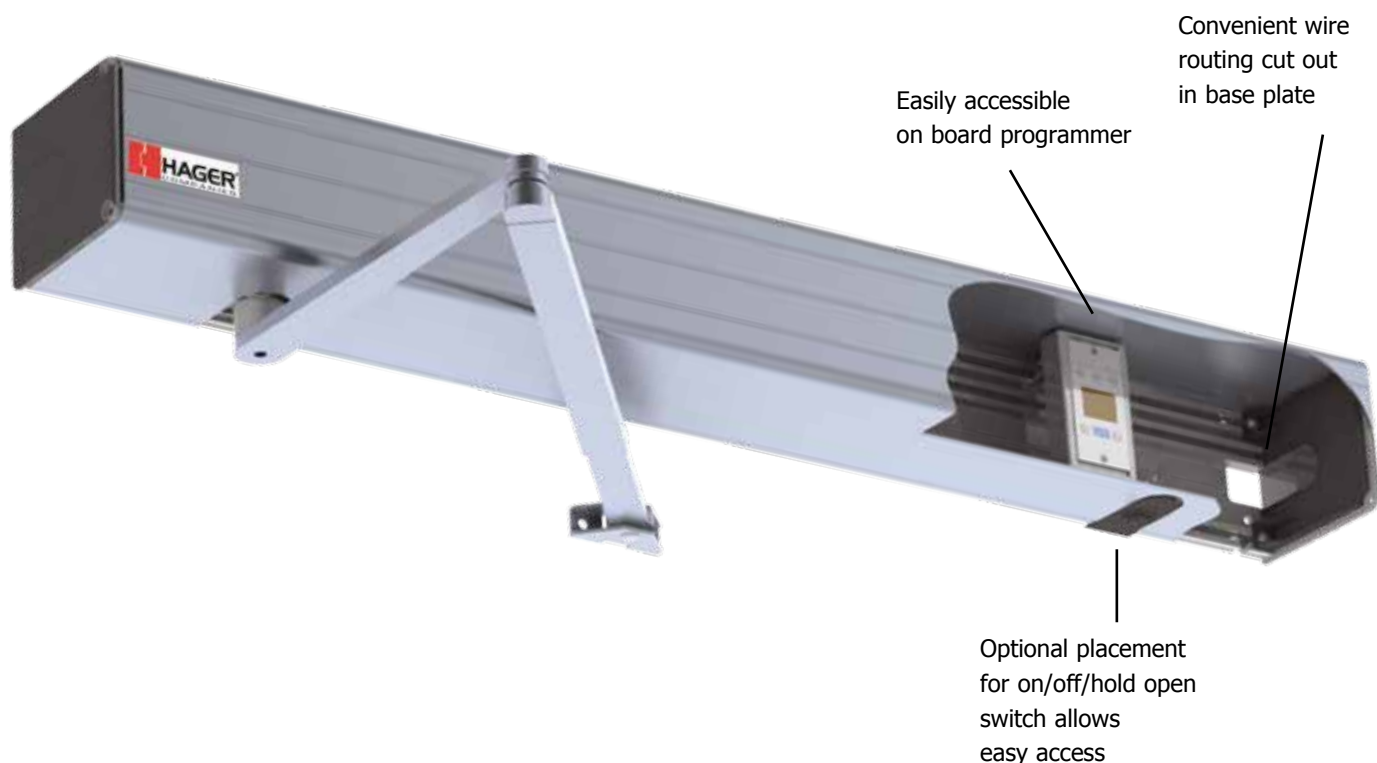


# 8400 Series Low Energy Power Operator



As more and more buildings are becoming ADA compliant, more options need to be made available. Hager's low energy operators allow you to do just that without a long list of part numbers to keep track of. Instead, Hager's low energy operators are customizable so that you can meet your customer's requirements and expectations each and every time.

The 8400 Series is Hager's premium low energy operator that reduces installation costs by being designed in a unique way that allows for one person installation and each unit includes an on-board programmer so that the installer programs one unit and then uses a flash drive to set up the other units in the same way with the same functionality.









## LOW ENERGY POWER OPERATOR COMPONENT SELECTION

### 1 Low Energy Power Operators

#### 8400 Series - (Pages 54-61)

Premium Low Energy Power Operator

- Single Operator
- Paired Operator
- Double Egress Operator
- Single Operator Paired with Mechanical Closer
- Mechanical Closer

#### 8200 Series - (Pages 67-69)

Economy Low Energy Power Operator

- Single Operator
- Double Egress Operator



### 2 Parts & Accessories

#### 8400 Series - (Pages 63-65)

- Track Arm
- Standard Arm
- Standard Arm - Double Egress
- Track Arm - Double Egress
- Replacement Spindle

#### 8200 Series (Pages 71-73)

- Standard Arm
- Standard Arm - Double Egress
- Track Arms

Standard Arm

Track Arm - Double Egress

Track Arm

Standard Arm - Double Egress

Replacement Spindle  
20 mm

Replacement Spindle  
35 mm

Replacement Spindle  
50 mm

### 3 Actuators (Pages 75-84)

- 4.5" Square Actuator
- 6" Square Actuator
- 4.5" Round Actuator
- 6" Round Actuator
- 1.5" x 4.75" Jamb Actuator
- 36" Low Profile Actuator
- 4.75" Vestibule Actuator
- Bollard Posts



Square Actuator



Round Actuator



1.5" x 4.75" Jamb Actuator



Touchless Square Actuator



Touchless Round Actuator



Bollard Posts



4.75 Vestibule Actuator



36" Low Profile Actuator

### 4 Accessories (Pages 85-87)

- 433 MHz Receiver
- 3-Volt Wireless Transmitter
- 9-Volt Wireless Transmitter
- Wireless, One Button Transmitter
- Programmable Relay and Door Sequencer



Programmable Relay and Door Sequencer



3-Volt Wireless Transmitter



Wireless, One Button Transmitter



433 MHz Receiver



9-Volt Wireless Transmitter

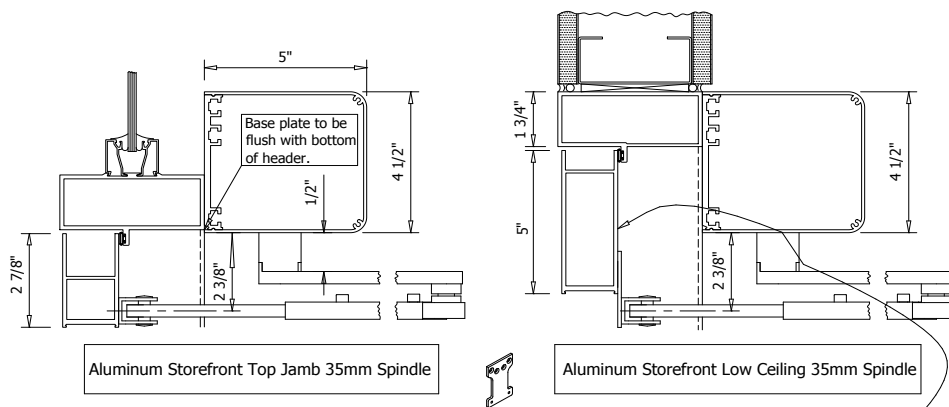


## 8400 SERIES LOW ENERGY POWER OPERATOR - STANDARD APPLICATIONS

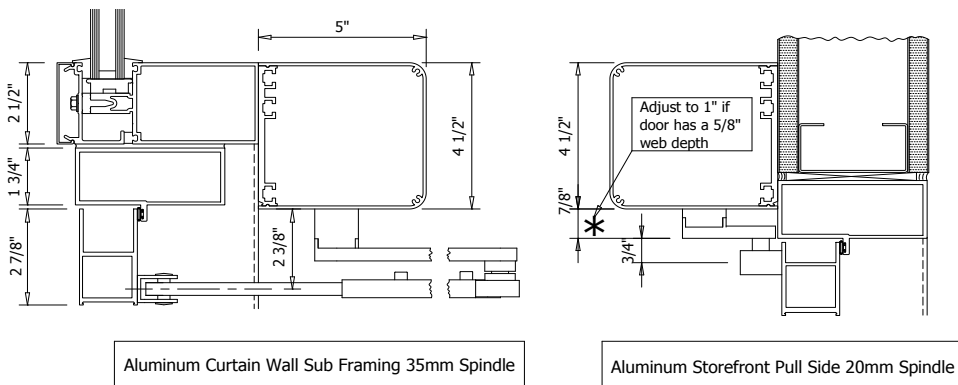
Hager Companies 8400 Series Low Energy Power Operator meets ANSI/BHMA A156.19 standards for power assist and low energy operators and is designed to meet the requirements of door openings that occasionally have the need for an automatic opening. These devices can be used on single and double doors including double egress applications. This door opening solution provides a consistent closing and opening of the door, which is especially beneficial in situations that require compliance with the Americans with Disabilities Act (ADA). The use of Hager's Low Energy Power Operator provides easy access for not only people with disabilities, but also allows for manual operation of the door when necessary.

The 8400 Series is designed for ease of installation, allowing it to be installed by a single person. It also provides a quiet, smooth operation preventing any unwanted noise in the opening and surrounding area. The use of a digital display makes programming the operator uncomplicated and provides a resourceful tool for maintaining the device and assessing its status.

In addition to the Low Energy Power Operator, Hager offers a full range of actuators to be used in conjunction with the operator. The switches available for activation of the operator come in a variety of sizes and options, including wireless and hard wired. Hager also offers an option that exceeds the California Building Code, Section 1117B.6 by providing a push plate that meets height, reach range, and operation requirements for those with disabilities.

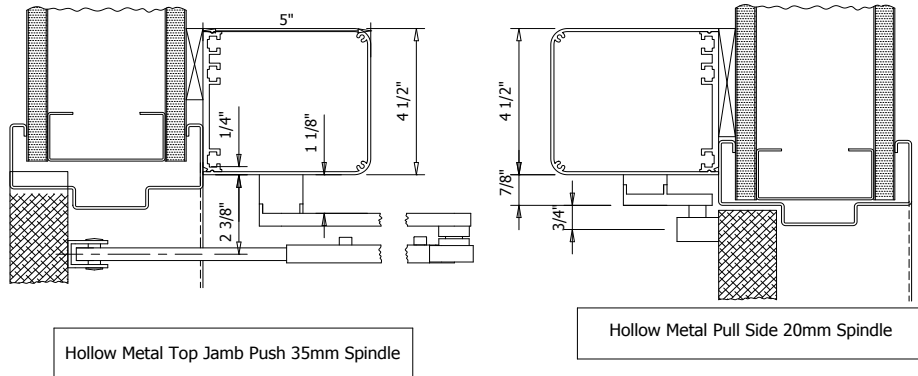


**Note: Optional arm shoe drop plate is available for applications with a top rail less than 5". See page 9 for additional information.**

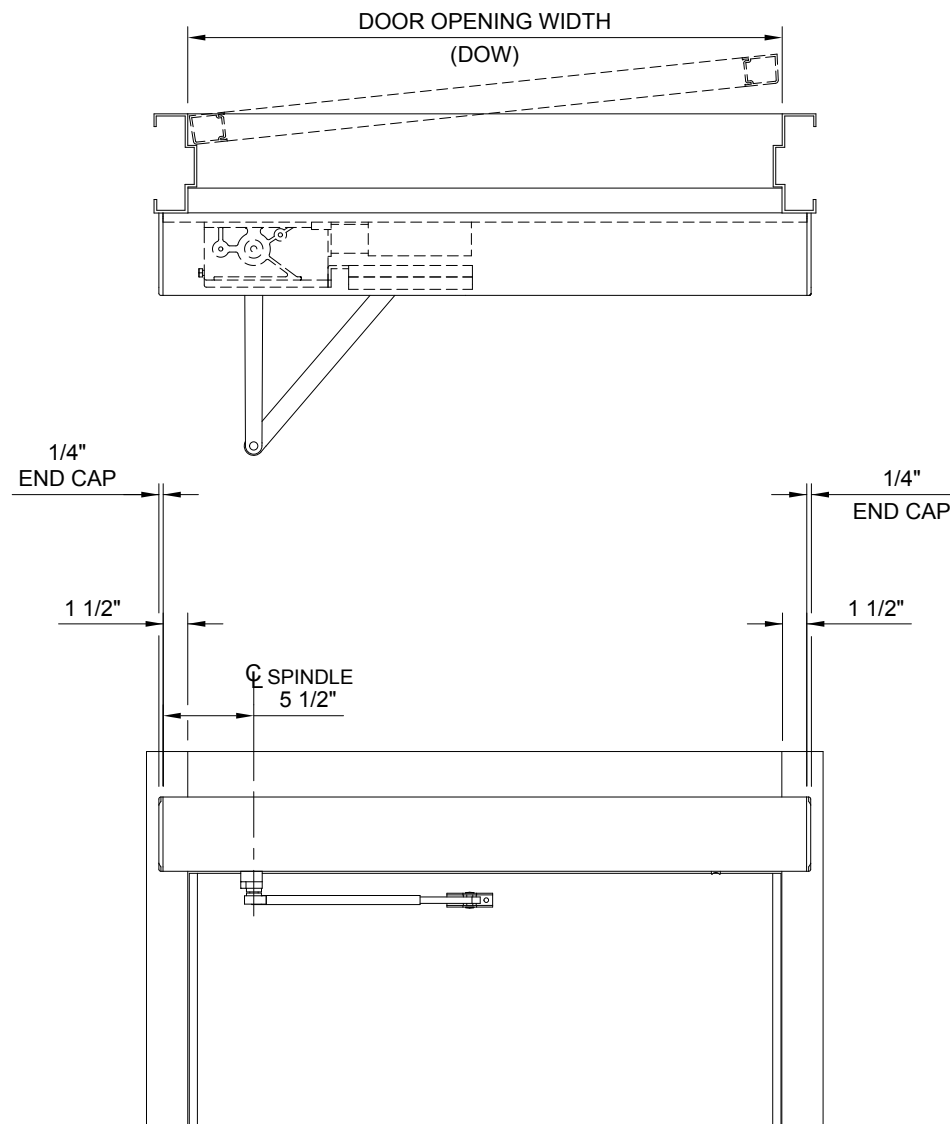




## 8400 SERIES LOW ENERGY POWER OPERATOR - STANDARD APPLICATIONS



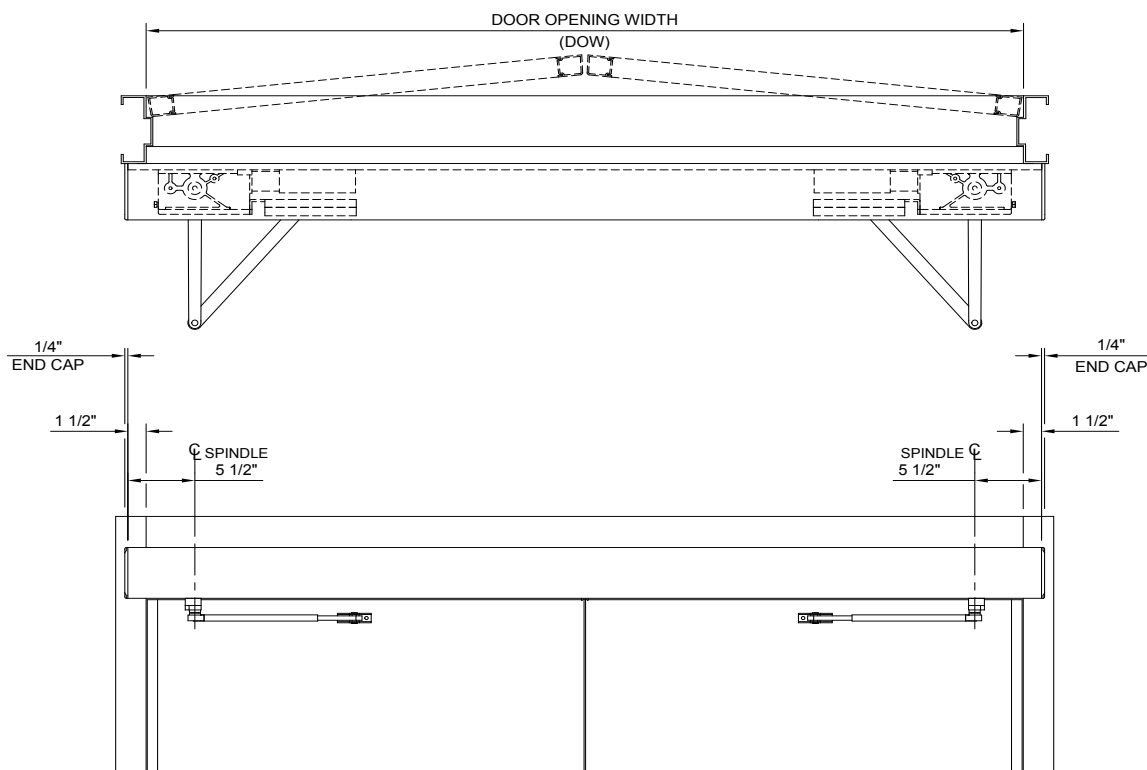
### SINGLE OPERATOR



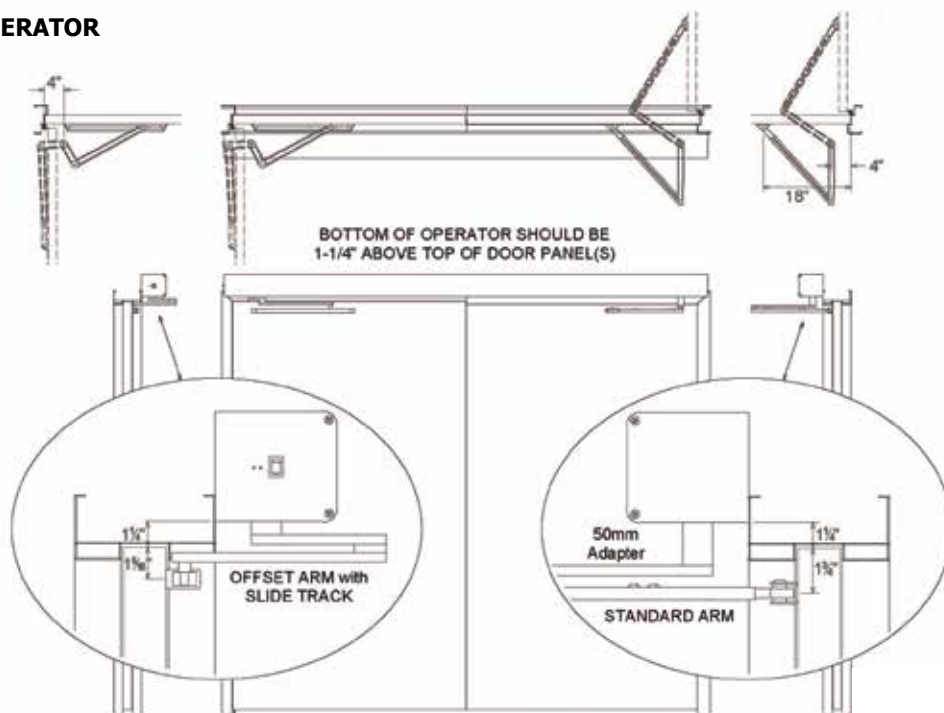


## 8400 SERIES LOW ENERGY POWER OPERATOR - STANDARD APPLICATIONS

### PAIRED OPERATOR



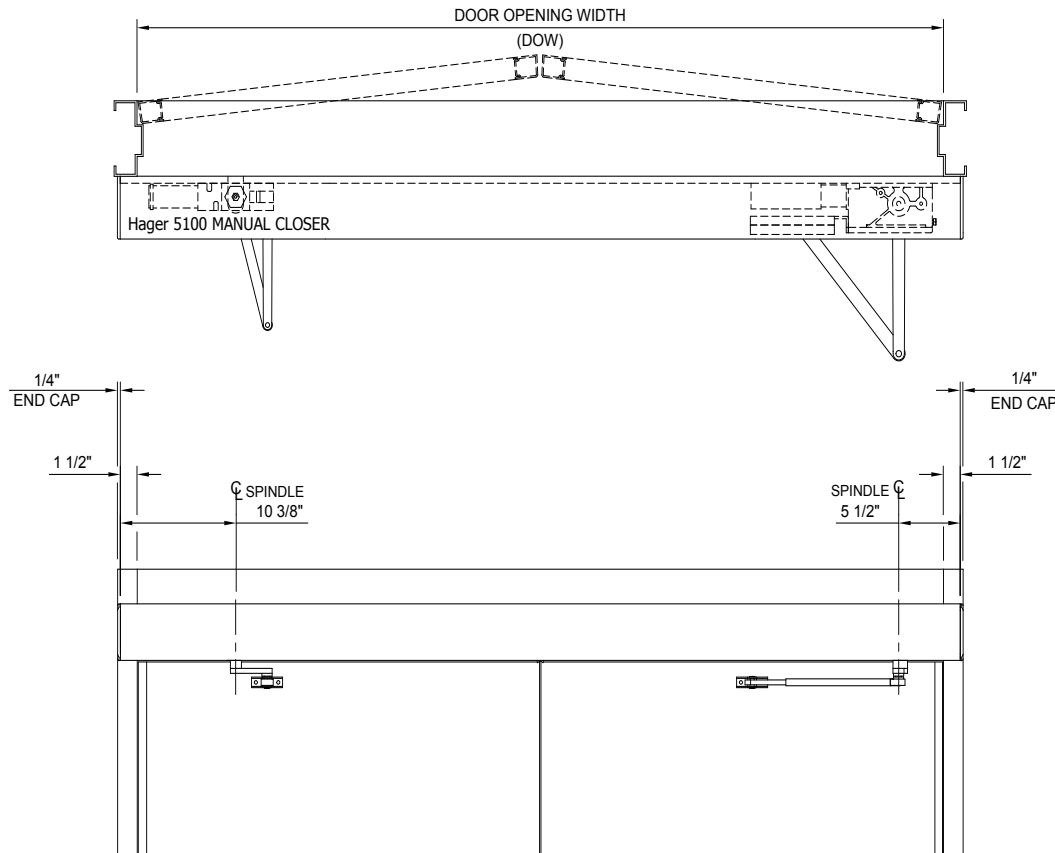
### DOUBLE EGRESS OPERATOR



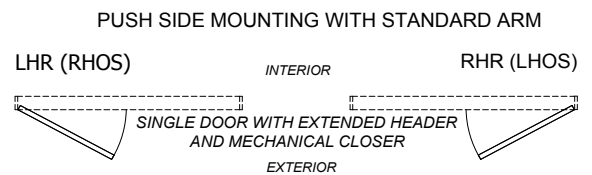
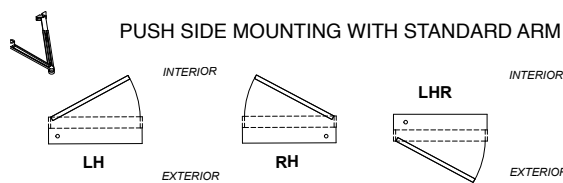


## 8400 SERIES LOW ENERGY POWER OPERATOR - STANDARD APPLICATIONS

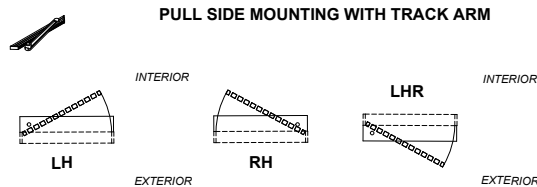
### SINGLE OPERATOR PAIRED WITH MECHANICAL CLOSER



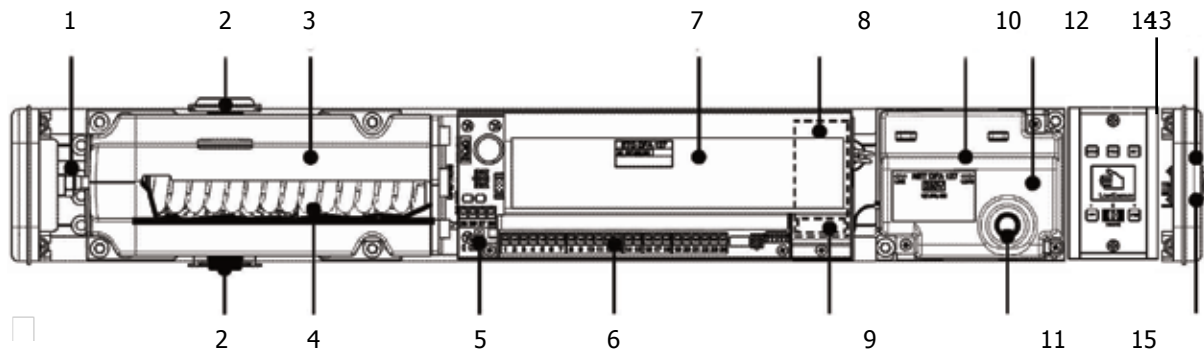
### OPERATOR HANDING IDENTIFICATION



**Note: Specify leaf to receive operator.**



## 8400 SERIES LOW ENERGY POWER OPERATOR - PARTS AND ASSEMBLY DETAILS



1. Adjusting screw for spring tension
2. Output shafts for arms & stop
3. Drive unit
4. Closing spring
5. Multifunction push button/control
6. Terminal blocks for I/O
7. Microprocessor control

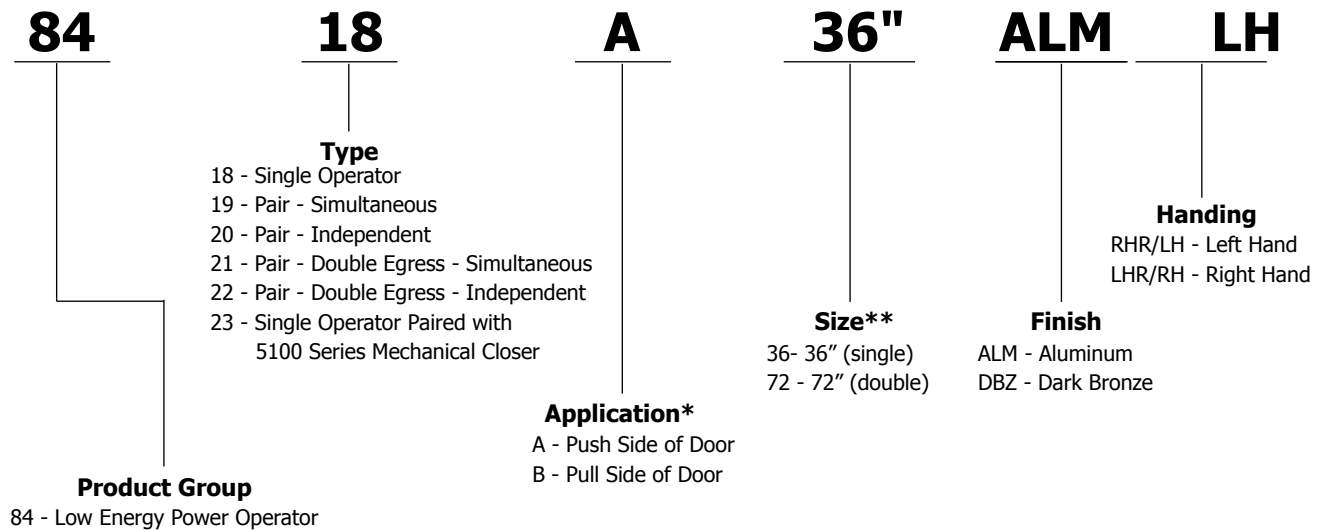
8. Motor drive circuit board
9. Slide switch S1 (rotating direction)
10. Power supply
11. Fuse (2.0A, 5 x 20mm, Slo-Blo)
12. Power supply circuit board
13. Onboard programmer
14. On/Off/Open rocker switch
15. Status LED and reset push button





## 8400 SERIES LOW ENERGY POWER OPERATOR - HOW TO ORDER

### 8400 SERIES



\* **Note:** Push side of door comes with standard arm. Pull side of door comes with track arm.

\*\* **Additional sizes available. See page 7 for additional information.**

\* **Note:** Standard arm (push side, 0" - 4.1875" reveal) included.



## 8400 SERIES LOW ENERGY POWER OPERATOR

### MODELS

|      |                                                                                                                          |                                                                                    |
|------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 8418 | Single Operator (handed)                                                                                                 |  |
| 8419 | Simultaneous Pair (2 units, 1 controller, doors operate at the same time) For use with Hager mortise locks with deadbolt |                                                                                    |
| 8420 | Independent Pair (2 units, 2 controller, doors operate independently from each other)                                    |                                                                                    |
| 8421 | Double Egress Simultaneous Pair (2 units, 1 controller, doors swing in opposite directions at same time)                 |                                                                                    |
| 8422 | Double Egress Independent Pair (2 units, 2 controller, doors swing in opposite directions at different times)            |                                                                                    |
| 8423 | Single operator paired with 5100 Series closer for inactive door (handed)                                                |                                                                                    |

### WARRANTY

Two-year warranty

### APPLICATION

- For use on fire-rated and non-fire-rated outswing or inswing doors
- Built-in adjustable door stop for protection against wind or abusive environments
- Operates as a manual closer with or without power

### FEATURES

Application  
Features:

- Single person installation
- Pre-drilled mounting holes for ease of installation
- Three Operating Modes (On/Off/Hold Open)
- Designed for single doors from 36" to 48" (914 mm to 1,219 mm)
- Designed for double doors from 60" to 96" (1,524 mm to 2,438 mm)
- On-board power supply

Operational  
Functionality:

- Built-in adjustable door stop for protection against wind or abusive environments
- Interfaces with electric door hardware
- Operates as a mechanical closer if power is disconnected
- Obstacle recognition upon opening and closing
- Blow open function for smoke ventilation

Programmable  
Functionality:

- Boost on Close (selectable On/Off)
- Power Assist Close
- Power Boost Close - motor assist under wind and stack pressure
- Motor Hold Close
- Power Open and Hold - for smoke evacuation
- Adjustable Opening Force Limitation
- Adjustable Opening and Closing Speeds
- Adjustable Opening Angle
- Adjustable Hold Open Time for Door Activators (1 sec to continuous)
- Sequential Operation (push to open/push to close operation)
- Built-In Stop - Manual swing to 180°/ Power swing to 100°
- Fire Alarm input shunts swing activations until FACP is manually reset
- Internal LCD display
- Memory is flash upgradeable

Certification:

- ANSI A156.19 compliant
- UL/cUL Listed for up to 3-hours
- UL10C Listed for Positive Pressure Rating
- ADA compliant





## 8400 SERIES LOW ENERGY POWER OPERATOR

### ELECTRICAL SPECIFICATIONS

|                           |                                                                                          |
|---------------------------|------------------------------------------------------------------------------------------|
| Power Requirements:       | 115 VAC 60 HZ                                                                            |
| Current Draw:             | 3A                                                                                       |
| Auxiliary Output Voltage: | 500mA @ 24 VDC                                                                           |
| Fuse Type:                | 2.0A, 5 x 20mm, Slo-Blo                                                                  |
| Electric Lock Relay Type: | Form "C" SPDT                                                                            |
| Lock Relay Rating:        | 5.0A @ 28 VDC                                                                            |
| Operating Temperature:    | -40° to 140° F (-40° to 160° C) ambient operating temperature in all climatic conditions |

### MECHANICAL SPECIFICATIONS

|                          |                                                      |
|--------------------------|------------------------------------------------------|
| Dimensions:              | 5" H x 4-1/2" W x door width +3" L (127 mm x 114 mm) |
| Reveal:                  | Up to 12" standard                                   |
| Spring Adjustment:       | 5 lbs to 20 lbs closing force                        |
| Max Degree of Swing:     | 180°                                                 |
| On/Off/Hold Open Switch: | Standard                                             |
| Swing Direction:         | Inswing/Outswing                                     |
| Adjustable Swing Degree: | 80° to 180°                                          |

### FINISHES

|     |                              |
|-----|------------------------------|
| ALM | Aluminum anodized (standard) |
| DBZ | Dark bronze anodized         |

### NOTES

Must specify push or pull side mount  
Specify handing



# 8400 Series Parts & Accessories



In this section, you can find the various arms and spindles for the 8400 Series operator.





## 2-659-0151 | 2-659-0152

### Track Arm

- 20 mm spindle
- For use on pull side of the door
- 2-659-0151 is ALM, 2-659-0152 is DBZ



## 2-659-0153 | 2-659-0154

### Standard Arm

- 35 mm spindle
- For use on push side of the door
- 2-659-0153 is ALM, 2-659-0154 is DBZ



## 2-659-0220 | 2-659-0221

### Standard Arm - Double Egress

- 50 mm spindle
- For use on push side of the door
- 2-659-0220 is ALM, 2-659-0221 is DBZ



## 2-659-0222 | 2-659-0223

### Track Arm - Double Egress

- 20 mm spindle
- Offset adaptor
- For use on pull side of the door
- 2-659-0222 is ALM, 2-659-0223 is DBZ



## 2-659-0224 | 2-659-0225

### Replacement Spindle

- 20 mm
- For use with delayed egress or track arm assembly
- 2-659-0224 is ALM, 2-659-0225 is DBZ



## 2-659-0226 | 2-659-0227

### Replacement Spindle

- 35 mm
- For use with standard single and standard pair applications
- 2-659-0226 is ALM, 2-659-0227 is DBZ



## 2-659-0228 | 2-659-0229

### Replacement Spindle

- 50 mm
- For use with push side standard arm - double egress only
- 2-659-0228 is ALM, 2-659-0229 is DBZ



## ACCESSORIES



### **2-659-0230 | 2-659-0231** **Drop Plate**

- For use with low ceiling clearance
- 2-659-0230 is ALM, 2-659-0231 is DBZ



### **2-659-0236** **Power Supply**

- On-board replacement
- Power requirements: 115 VAC 60 Hz
- Output Voltage: 24 VDC 500mA



### **2-659-0232 | 2-659-0233** **Cover for Single Operator**

- 36" length - contact Hager Tech Support for special sizes
- Powder coated
- Anodized aluminum
- 2-659-0232 is ALM, 2-659-0233 is DBZ



### **2-659-0234 | 2-659-0235** **Cover for Dual Operators**

- 72" length - contact Hager Tech Support for special sizes or 8423 cover
- Powder coated
- Anodized aluminum
- 2-659-0234 is ALM, 2-659-0235 is DBZ

**Note: For additional replacement parts contact Hager Tech Support.**





# 8200 Series Low Energy Power Operator



The 8200 Series is Hager's economy low energy power operator. The modular platform allows installers to order the features they need.





## 8200 SERIES LOW ENERGY POWER OPERATOR - HOW TO ORDER

### 8200 SERIES

**82**

**Product Group**

82 - Economy Low Energy Power Operator

**18**

**Type**

18 - Single Operator  
19 - Simultaneous Pair  
22 - Double Egress Simultaneous Pair

**0**

**Default**

**31"**

**Size**

31- 31.5"  
51 - 51.5"

**ALM**

**Finish**

ALM - Aluminum  
DBZ - Dark Bronze





## 8200 SERIES LOW ENERGY POWER OPERATOR

### MODELS

|      |                                 |
|------|---------------------------------|
| 8218 | Single Operator                 |
| 8219 | Simultaneous Pair               |
| 8221 | Double Egress Simultaneous Pair |



### WARRANTY

One-year warranty

### APPLICATION

- For use on interior and exterior non-fire-rated outswing or inswing doors with butt hinges, offset pivots and center pivots
- On-board provisions for door status, battery backup and additional modules

### FEATURES

Application Features:

- Operates as a manual closer with or without power

- Non-Handed
- Three Operating Modes (On/Off/Hold Open)
- Designed for doors up to 48" wide (1219 mm)
- Designed for doors up to 275 lbs. (125 Kg)

Operational Functionality:

- Power Open Spring Close
- 1/4+ HP DC Motor
- Motor Protection Circuit - interrupts motor when there is an obstruction during opening
- ANSI A156.19 compliant
- ANSI/UL 325 listed for both United States and Canada
- ADA compliant

Certification:

Optional Programming and Features:

- Modular design allows for additional optional modules to be installed to fit any application*
- Control over electrified door hardware including electric strikes, magnetic lock or motorized latch retraction (MLR)
  - Sequencing of multiple doors in vestibule applications
  - Programming changes to extend Hold Open Times, Push and Go, Boost to Close and more
- See 8200 Accessories for additional information

### ELECTRICAL SPECIFICATIONS

Power Supply: On-board 24VDC output for accessories

Operating Temperature: +5° to 125° F (-15° to 50° C) ambient operating temperature in all climatic conditions

### MECHANICAL SPECIFICATIONS

Dimensions:

- Single: 4-9/16" H x 5" W x 31-1/2" L (116 mm x 127 mm x 800 mm)
- Pair: 4-9/16" H x 5" W x 75-1/2" L (116 mm x 127 mm x 1816 mm)

Standard Header Lengths:

- Single: 31.5" (800 mm)
- Single: 39.5" (1003 mm)
- Pair: 75.5" (1918 mm) up to 101.5" (2578 mm)
- Custom sizes up to 101.5" (2578 mm) available

Reveal:

- 0"-9.75" outswing
- 0"-6" Inswing

Opening Angles - Outswing:

Adjustable (0-110 degrees)

Opening Angles - Inswing:

Adjustable (0-110 degrees); Deep Reveal Arm Maximum (90 degrees)

### FINISHES

ALM  
DBZ

Aluminum anodized (standard)  
Dark bronze anodized





# 8200 Series Parts & Accessories



In this section, you can find the various arms and spindles for the 8200 Series operator.





## 8200 SERIES PARTS & ACCESSORIES - MODULES

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                      |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 2-659-0275                     | <ul style="list-style-type: none"><li>• Exterior Door Module (EDM) for 8200 Auto Operator</li><li>• Provides On-Board 1.5A @ 24VDC Output for an Electric Strike, Magnetic Lock or Motorized Latch Retraction (MLR) Exit Device with (0.2 – 4.0s) delay</li><li>• Requires iMotion programmer (2-659-0280)</li><li>• Allows for daylight operation</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |   |
| 2-659-0276                     | <ul style="list-style-type: none"><li>• Multiple Door Module (MDM-B) for 8200 Auto Operator</li><li>• Allows for operation of double leaved doors</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                      |
| Programmer:<br>2-659-0277      | Programming Interface Module (PIM) for 8200 Auto Operator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |   |
| 2-659-0280                     | iMotion Programmer w/ 6' Cord                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                      |
| Battery Backup:<br>2-659-0278  | Battery Backup with Interface Cable for 8200 Auto Operator<br>Note: 33" minimum header length on singles, and 36" for pairs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                      |
| 2-659-0279                     | Battery Backup Extension Harness for 8200 Auto Operator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| Programmable<br>Functionality: | <ul style="list-style-type: none"><li>• Push and Pull (selectable On/Off)</li><li>• Power Assist Close</li><li>• Power Boost Close - motor assist under wind and stack pressure</li><li>• Motor Hold Close</li><li>• Power Open and Hold - for smoke evacuation</li><li>• Adjustable Opening Force Limitation</li><li>• Adjustable Opening and Closing Speeds</li><li>• Adjustable Opening Angle</li><li>• Adjustable Hold Open Time for Door Activators (0 - 60 sec.)</li><li>• Sequential Operation (push to open/push to close operation)</li><li>• Built-In Safety Circuit w/ Stall/Carpet/Safety Slow/Reactivation</li><li>• Stall: when door is in motion, most commonly used with pull side door mounted sensor, the door stops before contact is made.</li><li>• <i>Carpet: used with an over head presence sensor, keeps a closed door closed and an open door open</i></li><li>• <i>Safety slow: used with a door mounted sensor on pull side, opens the door very slow</i></li></ul> |                                                                                      |

2-659-0275

2-659-0277

2-659-0280







## 8200 SERIES PARTS & ACCESSORIES

### Arm & Assemblies

2-659-0287 Push Side Arm Door Assembly (0 - 4.1875" reveal) CLR (standard arm)  
2-659-0288 Push Side Arm Door Assembly (0 - 4.1875" reveal) BLK (standard arm)  
2-659-0289 Push Side Arm Door Assembly (4.125 - 9.875" reveal) CLR  
2-659-0290 Push Side Arm Door Assembly (4.125 - 9.875" reveal) BLK  
2-659-0291 Double Egress Push Side Arm Door Assembly (0 - 4.1875" reveal) CLR (standard arm)  
2-659-0292 Double Egress Push Side Arm Door Assembly (0 - 4.1875" reveal) BLK (standard arm)  
2-659-0293 Double Egress Push Side Arm Door Assembly (4.125 - 9.875" reveal) CLR  
2-659-0294 Double Egress Push Side Arm Door Assembly (4.125 - 9.875" reveal) BLK  
2-659-0295 Pull Side Door Arm and Slide Track (0" reveal) CLR  
2-659-0296 Pull Side Door Arm and Slide Track (0" reveal) BLK  
2-659-0297 RH Pull Side Deep Reveal Arm and Track (0 - 6" reveal) CLR  
2-659-0298 RH Pull Side Deep Reveal Arm and Track (0 - 6" reveal) BLK  
2-659-0299 LH Pull Side Deep Reveal Arm and Track (0 - 6" reveal) CLR  
2-659-0300 LH Pull Side Deep Reveal Arm and Track (0 - 6" reveal) BLK

### Drive Shaft Arms

2-659-0283 2.65" Drive Shaft Arm (double egress/deep reveal)  
2-659-0284 3.22" Drive Shaft Arm (standard in & out)  
2-659-0285 3.94" Drive Shaft Arm (special applications)  
2-659-0286 4.84" Drive Shaft Arm (double egress out)



# Actuators



Actuators are what allow the “knowing act” of a low energy operator. Hager offers various styles and types of actuators that will appeal to every installation. The typical 4.5” and 6” square or round actuators are available along with Hager’s line of jamb operators. For more unique installations or installations with wheelchair traffic, refer to the low profile actuators that can be activated in a 36” range from ground up.





## LOW ENERGY POWER OPERATOR ACTUATORS - TOUCHLESS ACTUATORS

### MODELS

|            |                                        |
|------------|----------------------------------------|
| 2-659-0303 | 6" round with text & handicap logo     |
| 2-659-0304 | 6" round with handicap logo only       |
| 2-659-0307 | 6" round with text only                |
| 2-659-0305 | 4.75" square with text & handicap logo |
| 2-659-0306 | 4.75" square with handicap logo only   |
| 2.659-0308 | 4.75" square with text only            |

### WARRANTY

One-year warranty

### APPLICATION

- For use with ADA low energy power operators
- Employs capacitance technology similar to smart devices to operate low energy doors
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

### FEATURES

- Touchless design reduces the spread of bacteria and germs
- LED illumination increases plate visibility
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges
- Various design options
- Adjustable detection zone
- Audible alert (selectable On/Off)

Certification:

NEMA rated

### SPECIFICATIONS

|                        |                                  |
|------------------------|----------------------------------|
| Finish:                | US32D with text and/or blue logo |
| Faceplate:             | 16 gauge, 304 stainless steel    |
| Backplate:             | Illuminated Mounting Ring        |
| Input:                 | 30 mA @ 12 to 24 VAC/VDC         |
| Operating Temperature: | -20° to 120°F (-30° to 49°C)     |
| Fasteners:             | 6-32 x 3/4" mounting screws      |





## LOW ENERGY POWER OPERATOR ACTUATORS - 4.5" SQUARE ACTUATOR

### MODELS

|            |                                       |
|------------|---------------------------------------|
| 2-659-0172 | 4.5" square with text & handicap logo |
| 2-659-0173 | 4.5" square with handicap logo only   |

### WARRANTY

One-year warranty

### APPLICATION

- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

### FEATURES

- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges

**Note: for wireless version, must order receiver and transmitter separately**

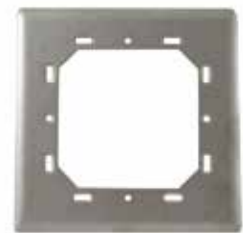
Certification: NEMA rated

### SPECIFICATIONS

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| Finish:                | US32D with text and/or blue logo                           |
| Faceplate:             | 16 gauge, 304 stainless steel                              |
| Backplate:             | 1/8" thick aluminum                                        |
| Cherry Switch:         | Single-pole, 15A/COM/NO/NC contacts                        |
| Operating Temperature: | -20° to 120°F (-30° to 49°C)                               |
| Fasteners:             | 6 - 3/2" x 1" and 8 - 3/2" x 1" Allen head mounting screws |

### OPTIONS

|            |                                                                                                                                                                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2-659-0174 | Surface Mount Box for 4.5" Square Actuator <ul style="list-style-type: none"> <li>• Provides adequate space for wireless transmitters</li> <li>• Simplified installation for applications with space limitations</li> <li>• Black finish</li> </ul> |
| 2-659-0241 | Universal Backplate <ul style="list-style-type: none"> <li>• For use when mounting actuator to bollard post</li> <li>• Stainless steel finish</li> </ul>                                                                                            |





## LOW ENERGY POWER OPERATOR ACTUATORS - 6" SQUARE ACTUATOR

### MODELS

|            |                                     |
|------------|-------------------------------------|
| 2-659-0169 | 6" square with text & handicap logo |
| 2-659-0170 | 6" square with handicap logo only   |

### WARRANTY

One-year warranty

### APPLICATION

- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

### FEATURES

- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges

**Note: for wireless version, must order receiver and transmitter separately**

Certification:

NEMA rated

### SPECIFICATIONS

|                        |                                                    |
|------------------------|----------------------------------------------------|
| Finish:                | US32D with text and/or blue logo                   |
| Faceplate:             | 16 gauge, 304 stainless steel                      |
| Backplate:             | 1/8" thick aluminum                                |
| Cherry Switch:         | Single-pole, 15A/COM/NO/NC contacts                |
| Operating Temperature: | -20° to 120°F (-30° to 49°C)                       |
| Fasteners:             | 6-32 x 1" and 8-32 x 1" Allen head mounting screws |

### OPTIONS

|            |                                                                                                                                                                                                                                               |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2-659-0171 | Surface Mount Box for 6" Square Actuator <ul style="list-style-type: none"><li>• Provides adequate space for wireless transmitters</li><li>• Simplified installation for applications with space limitations</li><li>• Black finish</li></ul> |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|





## LOW ENERGY POWER OPERATOR ACTUATORS - 4.5" ROUND ACTUATOR

### MODELS

|            |                                      |
|------------|--------------------------------------|
| 2-659-0165 | 4.5" round with text & handicap logo |
| 2-659-0166 | 4.5" round with handicap logo only   |

### WARRANTY

One-year warranty

### APPLICATION

- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

### FEATURES

- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges

**Note: for wireless version, must order receiver and transmitter separately**

Certification:

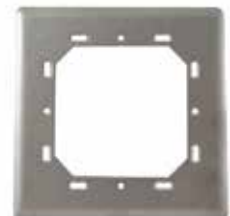
NEMA rated

### SPECIFICATIONS

|                        |                                                    |
|------------------------|----------------------------------------------------|
| Finish:                | US32D with text and/or blue logo                   |
| Faceplate:             | 16 gauge, 304 stainless steel                      |
| Backplate:             | 1/8" thick aluminum                                |
| Cherry Switch:         | Single-pole, 15A/COM/NO/NC contacts                |
| Operating Temperature: | -20° to 120°F (-30° to 49°C)                       |
| Fasteners:             | 6-32 x 1" and 8-32 x 1" Allen head mounting screws |

### OPTIONS

|            |                                                                                                                                                                                                                                                    |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2-659-0167 | Surface Mount Box for 4.5" Round Actuator <ul style="list-style-type: none"> <li>• Provides adequate space for wireless transmitters</li> <li>• Simplified installation for applications with space limitations</li> <li>• Black finish</li> </ul> |
| 2-659-0168 | Weather Ring for 4.5" Round Actuator <ul style="list-style-type: none"> <li>• Provides protection against moisture and weather elements</li> </ul>                                                                                                 |
| 2-659-0241 | Universal Backplate <ul style="list-style-type: none"> <li>• For use when mounting actuator to bollard post</li> <li>• Stainless steel finish</li> </ul>                                                                                           |







## LOW ENERGY POWER OPERATOR ACTUATORS - 6" ROUND ACTUATOR

### MODELS

2-659-0161

6" round with text & handicap logo

2-659-0162

6" round with handicap logo only

### WARRANTY

One-year warranty

### APPLICATION

- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

### FEATURES

- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges

**Note: for wireless version, must order receiver and transmitter separately**

Certification:

NEMA rated

### SPECIFICATIONS

Finish:

US32D with text and/or blue logo

Faceplate:

16 gauge, 304 stainless steel

Backplate:

1/8" thick aluminum

Cherry Switch:

Single-pole, 15A/COM/NO/NC contacts

Operating  
Temperature:

-20° to 120°F (-30° to 49°C)

Fasteners:

6-32 x 1" and 8-32 x 1" Allen head mounting screws

### OPTIONS

2-659-0163

Surface Mount Box for 6" Round Actuator

- Provides adequate space for wireless transmitters
- Simplified installation for applications with space limitations
- Black finish

2-659-0164

Weather Ring for 6" Round Actuator

- Provides protection against moisture and weather elements







## LOW ENERGY POWER OPERATOR ACTUATORS - 1.5" x 4.75" JAMB ACTUATOR

### MODELS

2-659-0175

Push to Open text and handicap logo

2-659-0176

Handicap logo only

### WARRANTY

One-year warranty

### FEATURES

- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Beveled edges

**Note: for wireless version, must order receiver and transmitter separately**

Certification:

- NEMA rated

### SPECIFICATIONS

Finish:

US32D with text and/or blue logo

Faceplate:

16 gauge, 304 stainless steel

Backplate:

1/8" thick aluminum

Cherry Switch:

Single-pole, 15A/COM/NO/NC contacts

Operating

Temperature:

-20° to 120°F (-30° to 49°C)

Fasteners:

6-32 x 1" and 8-32 x 1" Allen head mounting screws

### OPTIONS

2-659-0177

Surface Mount Box for 1.5" x 4.75" Jamb Actuator

- Provides adequate space for wireless transmitters
- Simplified installation for applications with space limitations
- Black finish





## LOW ENERGY POWER OPERATOR ACTUATORS - 36" LOW PROFILE ACTUATOR

### MODELS

|            |                                                  |
|------------|--------------------------------------------------|
| 2-659-0178 | Push to Open text and handicap logo - Wireless   |
| 2-659-0179 | Push to Open text and handicap logo - Hard wired |

### WARRANTY

One-year warranty

### APPLICATION

- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

### FEATURES

- Mounts to any flat surface
- Embossed graphics ensures durability
- Stainless steel faceplate provides durability while also reducing visible deterioration caused by abrasive cleaning agents
- Weather resistant
- Beveled edges
- 36" x 36" activation area and low profile 1" depth
- Four separate switches to allow activation from any angle
- Exceeds California Building Code, Section 1117B.6

Certification: NEMA Rated

### SPECIFICATIONS

|                          |                                                                            |
|--------------------------|----------------------------------------------------------------------------|
| Finish:                  | US32D with text and/or blue logo                                           |
| Faceplate:               | 16 gauge, 304 stainless steel                                              |
| Backplate:               | 1/8" thick aluminum                                                        |
| Transmitter Frequencies: | 433 MHz                                                                    |
| Dimensions:              | 6" (152 mm) W x 36" (990 mm) H x 1 (25 mm) D                               |
| Fasteners:               | Due to various mounting types, no fasteners are supplied with the actuator |





## LOW ENERGY POWER OPERATOR ACTUATORS - 4.75" VESTIBULE ACTUATOR

### MODEL

2-659-0242

Push to Open text and logo

### WARRANTY

One-year warranty

### APPLICATION

- For use with ADA low energy power operators
- Ideal installations include medical facilities, assisted living facilities, offices, clean rooms, and schools

### FEATURES

- Hard wired (standard) with wireless option
- Embossed graphics ensures durability
- 304 grade stainless steel finish - scratch resistant
- Interfaces with 2-659-0187 Programmable Relay and Door Sequencer for automatic sequencing applications
- Conserves energy and provides entrapment protection
- Beveled edges



### SPECIFICATIONS

Finish:

US32D with blue text and logo

Faceplate:

16 gauge, 304 stainless steel

Base Material:

1/8" thick aluminum

Cherry Switch:

Single-pole, 15A, COM/NO/NC contacts

Compatible

Wireless

Frequencies:

433 MHz

Fasteners:

6 - 32" x 1", 8 - 32" x 1" stainless steel

### OPTIONS

2-659-0243

Surface Mount Box for 4.75" Vestibule Actuator

- Provides adequate space for wireless transmitters
- Simplified installation for applications with space limitations
- Black finish





## LOW ENERGY POWER OPERATOR ACTUATORS - BOLLARD POST

### MODELS

2-659-0180  
2-659-0181  
2-659-0182

Black Powder Coat  
Bronze Powder Coat  
Silver Powder Coat

### WARRANTY

One-year warranty

### FEATURES

- For use with Hager's 4.5" square (2-659-0172 | 2-659-0173) and 4.5" round (2-659-0165 | 2-659-0166) actuators
- Can be mounted on existing or newly poured concrete
- UV resistant plastic cap allows for wireless transmissions

### SPECIFICATIONS

|                   |                                                  |
|-------------------|--------------------------------------------------|
| Material:         | Carbon steel                                     |
| Mounting Bracket: | Stainless steel                                  |
| Dimensions:       | 41.5" H x 6.25" W x 4.25" D (with cap attached)  |
| Weight:           | 35 lbs.                                          |
| Fasteners:        | Screws, expansion anchors, washers and nuts      |
| Note:             | Push plates not included - must order separately |



# Accessories



Accessories can make any ordinary installation unique. Hager offers different wireless transmitters and receivers that are commonly used in executive installations or other highly automated installations.



## ACCESSORIES



**433 MHz Transmitters  
and Receiver**



**2-659-0237  
RELAY BOARD**

- 24VDC
- Current draw: 40mA
- Contact rating : 5amp/220 VAC  
or 28VDC DPDT contacts

- Universally compatible with any type of automatic door application
- Used for wireless activation or sequencing of doors
- Receiver can be programmed with up to 100 transmitters
- Activation of transmitter utilizes a rolling code providing a protected signal

## MODELS



**2-659-0183  
433MHz Receiver**



**2-659-0185  
9-Volt Wireless  
Transmitter  
(Hardwired to Hager  
Actuators)**



**2-659-0184  
3-Volt Hard Wireless  
Transmitter (Hardwired  
to Hager Actuators)**



**2-659-0186  
Wireless, One Button  
Transmitter**

## FEATURES

- Transmitters can be programmed to multiple receivers
- Optional delay - no delay programming
- Toggle or pulse mode selectable by DIP switch
- Red LED on receiver verifies transmission and delivers troubleshooting assistance
- Red LED on transmitter ensures transmission and battery life
- Wire leads plug into terminals on Hager actuators - 2-659-0184 and 2-659-0185

## SPECIFICATIONS

|                                      |                                                                         |
|--------------------------------------|-------------------------------------------------------------------------|
| Frequency:                           | 433 MHz                                                                 |
| Input Voltage:                       | 12 to 24 VAC/VDC                                                        |
| Radio Control Type:                  | Digital                                                                 |
| Emitted Radio Power:                 | -28.7dBm (transmitter)                                                  |
| Number of Transmitters per Receiver: | 100 maximum transmitters                                                |
| LED Functions:                       | Red = Relay Activity<br>Blue = Receiver / Transmitter Learn             |
| Dimensions:                          | Receiver - 2.75" x 2.125" x 1.0"<br>Transmitter - 2.75" x 1.375" x 0.6" |
| Certifications:                      | CE, FCC, IC                                                             |





## ACCESSORIES



### 2-659-0240

#### Programmable Relay and Door Sequencer

- Provides a single solution for a variety of applications
- Three relays; two 3-AMP and one 1-AMP
- Built-in surge suppression eliminates the need for external components when installing electric locking devices
- Capable of door timing and advanced relay sequencing

#### FUNCTIONS

| FUNCTION            | SUBJECT                                             | MOST COMMON APPLICATIONS                                                                                                                                    |
|---------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>10</b><br>(MC10) | Simple Timer                                        | Time delay relay                                                                                                                                            |
| <b>11</b><br>(MC11) | Ratchet / Latching                                  | Push to open / Push to close                                                                                                                                |
| <b>21</b><br>(LE21) | Inhibitor with Door Position Input                  | Automatic swing door with push plate, approach side SuperScan is inhibited when door is closed                                                              |
| <b>22</b><br>(LE22) | 2 relay Sequence Inhibitor with Door Position Input | Automatic swing door with push plate, approach side SuperScan and Electric Strike. SuperScan is inhibited when door is closed                               |
| <b>25</b><br>(MC25) | 2 Relay Sequence                                    | Automatic swing door with a push plate and electric locking devices                                                                                         |
| <b>28</b><br>(MC28) | 2 Relay Sequence with Door Position Input           | Automatic swing door with a push plate and electric locking devices with a door position switch to prevent the delay from running during a recycle          |
| <b>29</b><br>(MC29) | Relay 1 Deactivation Timer                          | Automatic swing door or sliding door with an electric locking device and door position switch to prevent lock from reengaging before door closes completely |
| <b>35</b><br>(MC35) | 3 Relay Sequence                                    | Two door vestibule with automatic swing doors and single electric locking device                                                                            |
| <b>50</b><br>(M50)  | Interlock Timer with Door Position Inputs           | Interlock module that will only allow one door to open at a time and can be used with any automatic or manual door                                          |
| <b>55</b><br>(M55)  | Interlock Ratchet with Door Position Inputs         | Interlock module that will only allow one door to open at a time with a ratchet / latching function and can be used with any automatic or manual door       |
| <b>65</b><br>(M65)  | 2-Way, 2 Relay Sequence                             | Two door vestibule sequencing with automatic swing doors traveling in either direction                                                                      |
| <b>75</b><br>(MC75) | 2 Relay Sequence                                    | Automatic swing door with a push plate and electric locking devices                                                                                         |

#### SPECIFICATIONS

|                                                               |                                                             |
|---------------------------------------------------------------|-------------------------------------------------------------|
| <b>Supply Voltage</b>                                         | 12 to 24 VAC / DC                                           |
| <b>Power Consumption</b>                                      | 30 to 130 mA; DRY Output                                    |
| <b>Temperature Range</b>                                      | -15° to 150°F                                               |
| <b>Dimensions</b>                                             | 5.2" x 2.2" x 1.0"                                          |
| <b>Housing Material</b>                                       | Gray ABS Plastic                                            |
| <b>Input Specification</b>                                    | 1 to 4; DRY Contact                                         |
| <b>WET Input</b>                                              | 5 to 24 VAC / DC                                            |
| <b>Contact Rating DRY</b><br>Relay #1<br>Relay #2<br>Relay #3 | 3A @24VAC / 30VDC<br>3A @24VAC / 30VDC<br>1A @24VAC / 30VDC |
| <b>Contact Rating WET</b><br>Relay #1                         | 1A                                                          |

