DORMA

ELECTRONIC ACCESS CONTROL COMPONENTS

—

DORMA offers an extensive line of access control hardware — powered by products from Rutherford Controls, Inc., a DORMA Group Company.

Electromagnetic locks, including specialized locks, are designed for such applications as gates, cabinets, and sliding doors. Also available are shear locks, power supplies, electric strikes, programmable digital keypads, desktop consoles, push-buttons and key switch combinations.

DORMA offers a wide range of accessories to complement its line of Electronic Access Control products including Door Position Sensors, Power Transfer Devices, Timers/Relays, and Monitor Strikes.

Warranty
For details, refer to **DORMA Limited Warranty** on our website at **go.dorma.com/terms.**

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DORMA USA quality and environmental management systems in Reamstown, PA and Steeleville, IL are certified to ISO 9001:2008 and ISO 14001:2004.

POWER SUPPLIES

4–6

- **PS5**
- **PS6**

PS5 SERIES
—

DORMA's PS5 Series power supplies offer field selectable output voltage and are available with door control modules and battery backup to fit your application needs.

The PS5 Series power supplies feature high performance, heavy-duty circuitry for inductive loads and multidoor applications.

The modular design is built around several different application control modules to meet your needs for many electric locking systems.

Documentation is provided to ensure easy installation for individual or multidoor systems that may include locking devices, access controls, station controls, and fire/life safety system interfaces.

Features
- Field selectable voltage 12/24 VDC.
- Fire panel interface optional on all models.
- Battery back-up ready — no additional up-grade boards required (batteries sold separately).
- UL listed.
- Surge protected input.
- Filtered and regulated output.
- Class 2 outputs, where permitted by code; Conduit is not required when using class 2 outputs.

Recommended Applications
- Higher powered supplies for multiple door applications
- Access control systems
- Keypads/Readers
- Electric strikes
- Magnetic locks

HOW TO ORDER PS5 SERIES
—

Item	VAC	Output @ 24 V	Output @ 12 V
PS532RF	110	2.0 A	2.0 A
PS534RF	110	4.0 A	4.0 A
PS536RF	110	6.0 A	6.0 A
PS502-220	220	1.0 A	1.0 A

Optional Accessories

TD

TD Time Delay Relay Module
When triggered, the optional TD module will unlock a door for a field adjustable time of 1 to 120 seconds. A reset trigger from a door position switch can be used to terminate the time delay and relock the door.
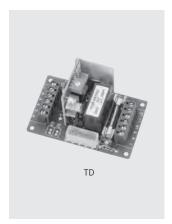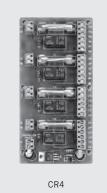
- Input Voltage: 12 or 24 VDC.
- Input Current: 35 mA.
- Dry Trigger Inputs: One—N.O. Dry, One—N.C. Dry.
- Wet Trigger Input: Normally off;

Trigger voltage must be the same as the lock and supply voltage.
- Anti-Tailgate/Reset Input: N.O. Dry; When the door opens the magnetic contact closes, resetting the timer. The door locks when closed.
- Voltage Output: Fused SPDT, 5 A @ 30 VDC.
- Relay Output: Non-fused SPDT Dry, 5 A @ 30 VDC.
- Dimensions: 3.25" W x 2" H.

CR4

CR4 Four Station Control Relay Module
The optional CR4 module provides control of four (4) stations. Closing a switch across the dry trigger input for station A, B, C, or D will release the output for the amount of time that the trigger input is held closed. Can be used to indicate status or implement multiple door interlocks. The total current of all outputs cannot exceed the power supply rating.

- Input Voltage: 12 or 24 VDC.
- Input Current: 120 mA.
- Trigger Inputs: Four N.O. Dry.
- Fused Relay Outputs: Four, Fused SPDT Dry, 2 A @ 30 VDC.
- Non-fused Relay Outputs: Four, Non-fused, SPDT, Dry, 2 A @ 30 VDC.
- Dimensions: 6" W x 3.25" H.

FB-4

FB-4 Fused Terminal Board
The optional FB-4 provides four (4) individually fused outputs for modular system protection. The fuse rating for each output is determined by the load current of each output. The total current of all outputs cannot exceed the power supply rating.

UR2-4
Field programmable 2 door controller, 6 Selectable Output Modes.

Each output may be individually programmed with its own mode of operation.

- Conventional relay.
- Latching relay, on/off.

- Latch multistation zones on/off or all stations on/off.
- Time delay relay 1–60 seconds.
- Dual function latching on/ off, plus 1–60 second timed output when on.
- Emergency release input may control select stations or all stations.

Output Specification
- Field selectable voltage output or dry contact.
- Outputs individually configured as a dry contact or 12 or 24 VDC voltage output, (1) normally (on) and 1 normally (off).
- 2 fused SPDT relays, 5 A @ 30 VDC.
- 2 non-fused SPDT relays, 5 A @ 30 VDC.

PS6 SERIES

—

DORMA's PS6 Series Power Supplies are designed to support even the most challenging electronic access control applications.

Having a host of built-in features, PS Series power supplies are designed with reliability in mind and incorporate life safety options required by the National Building Code, such as fire panel interface, instant unlock when power is cut, and remote override reset capabilities for authorized personnel.

These power supplies are intended specifically for safe and reliable use with magnetic locks, electric strikes, keypads, card readers and other sensitive electronic access control system accessories.

The PS6 Series is listed with Class 2 outputs, which will accommodate wire runs without the need for conduit. Standard features include field selectable output voltage, fire panel interface, battery back-up

readiness, power surge protection for AC input, and fused protection for DC output.

Features

- Field selectable voltage 12/24 VDC.
- **Fire panel interface standard on all models.**
- Battery back-up ready — no additional up-grade boards required (batteries sold separately).
- UL 294 listed.
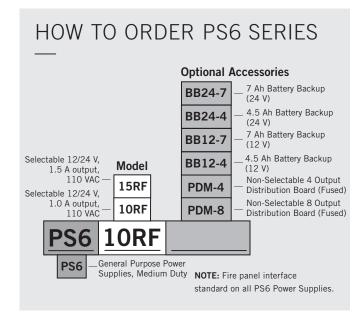- External power indicator LED.
- Surge protected input.
- Filtered and regulated output.
- Monitors AC failure using an on-board Form C relay to signal a remote monitoring system.
- NEMA Enclosure, Grade 1, with hinged cover.
- Knockouts for 1/2" or 3/4" conduit connections.

Recommended Applications

- Access control systems
- Keypads/readers
- Electric strikes
- Magnetic locks

HOW TO ORDER PS6 SERIES

—

Optional Accessories

BB24-7	7 Ah Battery Backup (24 V)
BB24-4	4.5 Ah Battery Backup (24 V)
BB12-7	7 Ah Battery Backup (12 V)
BB12-4	4.5 Ah Battery Backup (12 V)
PDM-4	Non-Selectable 4 Output Distribution Board (Fused)
PDM-8	Non-Selectable 8 Output Distribution Board (Fused)

Selectable 12/24 V, 1.5 A output, 110 VAC — **15RF** **Model**

Selectable 12/24 V, 1.0 A output, 110 VAC — **10RF**

PS6   10RF

PS6 — General Purpose Power Supplies, Medium Duty

NOTE: Fire panel interface standard on all PS6 Power Supplies.

Item	VAC	Output @ 24 V	Output @ 12 V
PS610RF	110	1.0 A	1.5 A
PS615RF	110	1.5 A	3.0 A

Optional Accessories

PDM4

PDM-4/ PDM-8 Non-Selectable 4 Output Distribution Board (Fused)
Distributes a single low voltage DC source into 4 or 8 outputs. When installed into a power supply, servicing time can be greatly reduced by the output indicator LEDs. If an output fuse is blown or PTC is tripped, the

accompanying LED will be off. Simply identifying the device connected to this output will allow for a problem to be quickly corrected. In addition to short circuit protection, the input terminals also have a surge protector that can absorb a 1500 Watt spike or surge to protect connected devices.

ELECTRIC STRIKES

—

8–14

- **ES62 & ES62F**
- **0563**
- **ES96F**

- **ES72F**
- **ES84 & ES86**
- **ES74F**

DORMA ES62 & ES62F 3/4" RIM ELECTRIC STRIKES

——

Completely surface mounted, eliminating frame cutting.

Designed especially to operate with rim exit devices, this rugged stainless steel strike accommodates hollow metal, aluminum, and wood doors. The one piece conventional keeper design promotes even load distribution in the event of attempted forced entry. The heavy-duty housing of the ES62 is reinforced to eliminate twisting in the case of imperfect frames. The smooth radius corners are esthetically pleasing, while reducing personal injury due to catch hazards.

Features

- 1500 lb (680 kg) holding force.
- No frame cutting required —surface mounted.
- Conventional keeper design —promotes even load distribution.
- Compatible with most exit devices.
- Accommodates exit devices with latch projections from 1/2" to 3/4" (12.7 mm to 19.1 mm).

- Ensures proper latch alignment with horizontal adjustment up to 1/4" (6.4 mm) to compensate for door misalignments.
- Field selectable voltage input—12 or 24 VDC, 12 to 24 VAC, 11 to 16 VAC.
- Horizontal solenoid prevents manipulation from the vibration.
- Modular **plug-in** wire connectors for fast hook-up.
- 630 stainless steel finish.
- Non-handed.
- Allen head cap screws for added support and tamper-resistance.
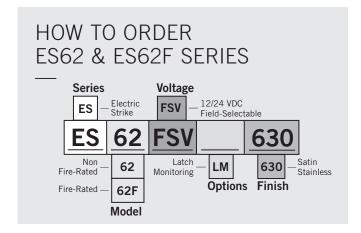- Mounting spacer included to provide enhanced latch engagement.

Listings & Approvals

- UL1034 listed for burglary resistance.
- ES62F—3 hour fire-rated.

Options & Accessories

- **LM**—Latch monitoring option
- **DPH62**—Double door housing
- **MSK62**—Mounting spacer kit 1/16" (1.5 mm)

Lock Down Holes for Added Stability

Conventional Keeper (one moving part)

HOW TO ORDER ES62 & ES62F SERIES

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ES62 Specifications

Mode	Voltage	Current	Duty	Sound	Amps
Fail Secure	12	AC	Intermittent	Buzz	.33
	12	DC	Continuous	Silent	.50
Fail Secure	24	AC	Intermittent	Buzz	.64
	24	DC	Continuous	Silent	.24
Fail Secure	11	AC	Intermittent	Buzz	.35
	16	AC	Intermittent	Buzz	.50

Intermittent duty = energized less than 1 minute with duty ratio 1:5.
Continuous duty = energized 1 minute or more

Available Items

ES62 & ES62F Electric Strikes (Available in 630 finish only)	
Item	**Description**
ES62 FSV 630	Surface mount rim exit strike, UL 1034 (CVXY), 12/24 V
ES62F FSV 630	3 hour fire-rated surface mount rim exit strike, UL 1034 (CVXY), 12/24 V
ES62 FSV LM 630	Surface mount rim exit strike with Latch Monitor switch, UL 1034 (CVXY), 12/24 V
ES62F FSV LM 630	Fire rated surface mount rim exit strike with Latch Monitor switch, UL 1034 (CVXY), 12/24 V
ES62 & ES62F Accessories	
DPH62	Door pair housing, ES62, 628 finish only
MSK62	Shim mounting kit, ES62

DORMA/RCI 0563 1/2" RIM ELECTRIC STRIKES

—

Slim adjustable design for standard backset installations.

This strong, durable surface-mounted strike is designed to work with rim exit devices and MOST door frame materials. A low-energy, auto-sensing strike, the 0563 runs cool during use.

The strike is made of high-grade stainless steel, combining exceptional strength and an appealing aesthetic.

Features

- 1500 lb (680 kg) holding force.
- No frame cutting required —surface mounted.
- Conventional keeper design —promotes even load distribution.
- Compatible with most exit devices.
- Accommodates exit devices with latch projections from 1/2" to 3/4" (12.7 mm to 19.1 mm).
- Ensures proper latch alignment with horizontal adjustment up to 1/4" (6.4 mm) to compensate for door misalignments.

- Lockdown holes for secure mount.
- Auto-sensing—12 to 24 VDC.
- Modular **plug-in** wire connectors for fast hook-up.
- 630 stainless steel finish.
- Non-handed.
- Hex socket head cap screws for added support and tamper-resistance.
- Mounting spacers included to provide enhanced latch engagement.
- Installation tool included (hex key).

Listings & Approvals

- UL1034 listed for burglary resistance.

Options & Accessories

- **LM**—Latch monitoring option
- **0563DDH**—Double door housing (not compatible with 0563LM model)

Lock Down Holes for Added Stability

Conventional Keeper (one moving part)

Optional Latch Monitor

HOW TO ORDER 0563 SERIES

—

Options

LM — Latch Monitoring

0563 ___ **630**

Non Fire-Rated — **0563**
Model

630 — Satin Stainless
Finish

0563 Specifications

Mode	Voltage	Current	Duty	Amps
Fail Safe/Secure	12–24	DC	Continuous	.03

Continuous duty = energized 1 minute or more

Available Items

0563 Electric Strikes (Available in 630 finish only)

Item	Description
0563 630	1/2" surface mount rim exit strike, UL 1034 (CVXY), 12/24 V
0563 LM 630	1/2" surface mount rim exit strike with Latch Monitor switch, UL 1034 (CVXY), 12/24 V
0563 Accessories	
0563DDH	Door pair housing, ES63

DORMA ES96F FIRE-RATED MODULAR MORTISE ELECTRIC STRIKES

—

Combining strength and convenience in an attractive design.

The unique saw-tooth adjustment locator design of the ES96F allows the installer to move the dead bolt keeper, or plug and deadlatch ramp vertically to align with a wide variety of mortise locks with offset latches. There is no need to order special faceplates—the strike can be adjusted to work with any mortise lock. Everything needed is in the box, including a separate faceplate for centerline latch entry.

For easy installation, the strike's shim design adjusts vertically on the keeper to align with any latch location, providing up to 1/8" horizontal adjustment. Also included are a trim plate for inconsistent frame cuts, a hands-free adhesive backed template, and all the needed drivers to install the strike.

The plug-in latch monitor switch option can be added in the field if monitoring is specified after installation.

Features

- 1500 lb (680 kg) holding force.
- Modular design allows compatibility with most locks without having to order special faceplates.
- Adjustable dead bolt keeper and deadlatch ramp.

- Accommodates 3/4" (19.1 mm) latch projection.
- Horizontal adjustment (up to 1/4" or 6.4 mm) relieves side-load pressure, ensuring proper latch alignment.
- Faceplate included for centerline latch entry.
- Unique sliding shim design for up to 1/8" (3.2 mm) horizontal adjustment for misaligned frames.
- Vertical adjustability of strike for precise positioning of lockset.
- Accommodates up to 1" dead bolt—bolt will not release.
- Field-selectable voltage input—12 or 24 VDC or 12–24 VAC.
- Anti-tamper security screws.
- All installation drivers included.
- Optional latch monitor kit.
- Low current draw (.19 A @ 24 VDC).
- Plug-in wire connector.
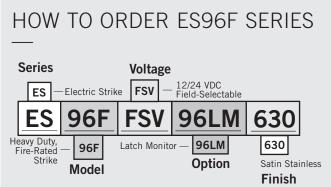- Trim plate included.
- Non-handed.
- 630 stainless steel finish.

Listings & Approvals

- UL1034 listed for burglary resistance.
- 3 hour fire-rated.

Options & Accessories

- **96LM**—Latch monitor kit with SPDT switch, can be mounted anywhere in strike cavity to correspond to latch position, rated 2 A @ 24 VDC

Adjustable Dead Bolt Keeper

Adjustable Deadlatch Ramp

Optional Plug-in Latch Monitor

Dead Bolt Plug

Saw-Tooth Adjustment Locator

HOW TO ORDER ES96F SERIES

—

Series	Model	Voltage	Option	Finish
ES —Electric Strike		**FSV** — 12/24 VDC Field-Selectable		
ES	**96F**	**FSV**	**96LM**	**630**
Heavy Duty, Fire-Rated Strike	**96F** **Model**	Latch Monitor	**96LM** **Option**	**630** Satin Stainless **Finish**

Available Items

ES96F Electric Strikes (Available in 630 finish only)

Item	Description
ES96F FSV 630	Heavy duty, fire-rated mortise strike, 12/24 V, 3 hr
ES96F FSV LM 630	Heavy duty, fire-rated mortise strike with Latch Monitor switch, 12/24 V, 3 hr
ES96F Accessories	
96LM	Latch monitor switch, ES96F

DORMA ES72F
ELECTRIC STRIKES
—

The answer for heavy-duty applications requiring fire-rated strikes.

The unique anti-vibration design of these commercial duty strikes prevents manipulation by vibration. For use with cylindrical locks, the ES72F has earned its reputation as a durable, reliable, and economical means of controlling access.

Features
- 1500 lb (680 kg) holding force.
- ANSI-size faceplate (1-1/4" × 4-7/8").
- Accommodates 3/4" latch projections (pullman design not inluded).
- Conventional keeper design—promotes even load distribution.

- Enlarged latch cavity width allows compatibility with cylindrical and centerline mortise locks (including 3-piece anti-friction type) and mortise exit devices.
- 1-1/2" cut-out depth accommodates most aluminum and hollow metal frames.
- For use with wide range of door thicknesses (1-3/8" to 2-3/8").
- AC/DC input acceptable for all fail secure models.
- Non-handed.
- Standard mounting tabs and fasteners included.
- Unique anti-vibration design prevents manipulation.
- Available in 12 V or 24 V.
- 630 stainless steel finish.

Listings & Approvals
- UL1034 listed for burglary resistance.
- 1-1/2 hour fire-rated.

HOW TO ORDER ES72F SERIES
—

ES72F Specifications

Mode	Voltage	Current	Duty	Sound	Amps	Ohms
Fail Secure	12	AC	Intermittent	Buzz	.15	61
	12	DC	Continuous	Silent	.20	61
Fail Secure	24	AC	Intermittent	Buzz	.07	215
	24	DC	Continuous	Silent	.11	215

Intermittent duty = energized less than 1 minute with duty ratio 1:5.
Continuous duty = energized 1 minute or more

Available Items

ES72F Electric Strikes (Available in 630 finish only)

Item	Description
ES72F 12V 630	Commercial duty, fire-rated cylindrical strike, 12 V, 90 minute fire rated
ES72F 24V 630	Commercial duty, fire-rated cylindrical strike, 24 V, 90 minute fire rated

ES72F Accessories

72HK	Mounting hardware kit, ES72

DORMA ES84 & ES86 ALL-IN-ONE CENTERLINE LATCH ENTRY ELECTRIC STRIKES

—

Combining several requested key features.

Standard features include a multi-voltage single solenoid, selectable lock mode, horizontal adjustment, and plug-in wire connectors. An optional monitor switch is also available. The ES84 low profile version accepts 1/2" or 5/8" latch projection (perfect for narrow stile aluminum frames). The ES86 standard version is ideal when you require 3/4" latch projection. Distributors and installers can cut their strike inventory significantly, because one strike does it all.

Features

- 1500 lb (680 kg) holding force.
- Field selectable lock mode—choose fail secure or fail safe with the turn of a dial (fail safe mode requires DC voltage).
- Field selectable voltage input—accommodates 12 or 24 VDC and 12 to 24 VAC in one strike.
- 1/4" horizontal adjustment.
- Dual monitor switch (optional).
- Modular **plug-in** wire connectors for fast hook-up.

- Modular faceplate designs for a variety of frame types and cut outs.
- 1-3/16" (ES86), 1-1/16" (ES84) frame depth.
- Standard strike kit includes 3 faceplates—S4, S4S, and S7.
- 630 stainless steel faceplate.
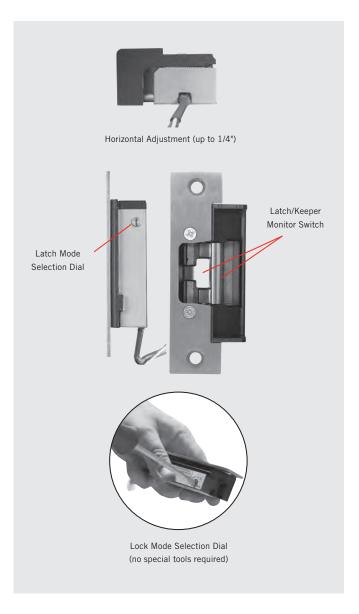- Non-handed.
- Trim plate included.

Listings & Approvals

- UL1034 listed for burglary resistance.

Options & Accessories

- **LKM**—Latch/keeper monitor switch (status)
- **84LE1/2/3 & 86LE1/2/3**—Low or standard profile lip extension kit for retrofit (specify 1, 2, 3)
- **84JIG/86JIG**—Low or standard profile frame prep jig
- **84HK/86HK**—Standard strike mounting hardware kit
- **86LG**—High profile latch guard
- **84TPS**—Low profile trim plate, 5 pack
- **86TPS**—Standard profile trim plate, 5 pack

Horizontal Adjustment (up to 1/4")

Latch Mode Selection Dial

Latch/Keeper Monitor Switch

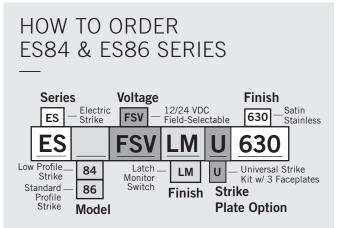Lock Mode Selection Dial (no special tools required)

ES86U Standard Profile & ES84U Low Profile with Universal Strike Kit

Includes 3 faceplates
- **S4**—1-1/4" × 4-7/8" ANSI round corner (aluminum frames)
- **S4S**—1-1/4" × 4-7/8" ANSI square corner (hollow metal frames)
- **S7**—1-7/16" × 7-15/16" ANSI round corner (aluminum or wood frames)

HOW TO ORDER ES84 & ES86 SERIES

—

Series		Voltage			Finish	
ES	Electric Strike	FSV	12/24 VDC Field-Selectable		630	Satin Stainless

ES		FSV	LM	U	630

Low Profile Strike	84		Latch Monitor Switch	LM Finish	U	Universal Strike Kit w/ 3 Faceplates
Standard Profile Strike	86					

Model · Finish · Strike Plate Option

ES84 & ES86 Specifications

Mode	Current	Duty	Sound	Current	Ohms
Fail Safe/ Secure	12 DC	Continuous	Silent	.375	37
Fail Safe/ Secure	24 DC	Continuous	Silent	.190	148
Fail Safe/ Secure	12 to 24 AC	Intermittent	Buzz	.280 to .65	37

Intermittent duty = energized less than 1 minute with duty ratio 1:5.

Continuous duty = energized 1 minute or more

Available Items

ES84 & ES86 Electric Strikes (Available in 630 finish only)

Item	Description
ES84 FSV U 630	Low profile, commercial duty cylindrical strike, 12/24 V
ES84 FSV LM U 630	Low profile, commercial duty cylindrical strike with Latch Monitor switch, 12/24 V
ES86 FSV U 630	Standard profile, commercial duty cylindrical strike, 12/24 V
ES86 FSV LM U 630	Standard profile, commercial duty cylindrical strike with Latch Monitor strike, 12/24 V
Strike Plate Options (ES84/86, 630 finish)	
U	Universal strike kit standard with ES84/86 electric strikes includes (3) face plates S4, S4S, S7 and S7
S4*	1-1/4" × 4-7/8" with radius corners
S4S*	1-1/4" × 4-7/8" with square corners
S5	1-1/8" × 5-7/8" with radius corners
S6	1-1/4" × 6-7/8" with radius corners
S7*	1-7/16" × 7-15/16" with radius corners

* Included with "U" kit

DORMA ES74F HEAVY DUTY ELECTRIC STRIKES

—

Ideal for fire-rated or heavy-duty applications.

The ES74F electric strikes are designed with a unique built-in anti-vibration feature, a saddle-mounted housing, and a tamper-resistant guard for increased strength and durability. Crossed wires are never a problem, as the coil is not polarity-conscious.

Features

- 1500 lb (680 kg) holding force.
- Accommodates 1/2" (12.7 mm), 5/8" (15.9 mm), or 3/4" (19.1 mm) latch projection (pullman design not included).
- Horizontal adjustment (up to 1/4" or 6.4 mm) relieves side-load pressure, ensuring proper latch alignment.
- Saddle-mount housing design for enhanced strength and durability.

- Unique anti-vibration design prevents manipulation.
- Tamper-resistant guard concealed behind the door frame increases strength and prevents manipulation by tool attack.
- Heavy-duty solid cast stainless steel housing design.
- Energy efficient coil design.
- Dual monitor switch (optional).
- Modular **plug-in** wire connectors for fast hook-up.
- Non-handed.
- Standard mounting tabs, shims, and fasteners included.
- 630 stainless steel finish.

Listings & Approvals

- UL1034 listed for burglary resistance.
- **1-1/2 hour fire-rated.**

ES74F

Tamper-resistant guard concealed behind the door frame increases strength and prevents manipulation by tools or probes

HOW TO ORDER ES74F SERIES

—

ES74F Specifications

Mode	Voltage	Current	Duty	Sound	Amps	Ohms
Fail Secure	12	AC	Intermittent	Buzz	.15	61
	12	DC	Continuous	Silent	.20	61
Fail Secure	24	AC	Intermittent	Buzz	.07	215
	24	DC	Continuous	Silent	.11	215

Intermittent duty = energized less than 1 minute with duty ratio 1:5.
Continuous duty = energized 1 minute or more

Available Items

ES74F Electric Strikes

Item	Description
ES74F 12V 630	Heavy duty, fire-rated cylindrical strike, 12 V, 90 minute fire-rated
ES74F 24V 630	Heavy duty, fire-rated cylindrical strike, 24 V, 90 minute fire-rated

ELECTROMAGNETIC LOCKS

16–31

DORMA EML310 & EML320
MULTIPURPOSE ELECTROMAGNETIC LOCKS
—

Quick installation for enhanced building security.

Several standard features make these magnets amongst the hardest workers in the industry. The adjustable mounting bracket has been enhanced with keyhole mounting to support the magnet's weight during initial installation, freeing the installer's hands to affix the magnet mounting screws. The removable cavity cover offers quick, easy access to wiring. Both models feature a built-in, adjustable time delay with instant unlock and delayed re-lock (up to 110 seconds), which can be controlled by any standard switching device.

Features
- 1500 lb (680 kg) holding force.
- Bond Alert (BA), Door Position Sensor (DP), and Tamper Switch (TS) options.
- Larger LED size for better visibility (Bond Alert versions only).

- 628 brushed anodized aluminum lock body.
- Adjustable keyhole mounting.
- **Built-in time delay** (instant release with adjustable re-lock, programmable from 0–110 seconds).
- Field selectable voltage—12/24 VDC.
- Convenient plug-in wiring terminals.
- Easy-access wiring cavity.
- Stabilizing 4-bolt mounting (8-bolt for EML320).
- MOV surge protection.
- No residual magnetism.
- Low energy consumption.
- Hardened steel armature nut.
- Self-drilling tek™ fasteners.

Listings & Approvals
- UL/CUL listed under their continuing reinspection programs and conforms to standards UL 10C and GWXT positive pressure fire testing, 1 hour fire rated UL294.
- ANSI/BHMA 156.23, Grade 1 listed.

c **UL** us
LISTED

BHMA
CERTIFIED

EML310 Single Outswinging
Interior or Perimeter Doors

Larger LED Size for Better Visibility
(Bond Alert versions only)

NOTE: When installed on access-controlled egress door assemblies, per NFPA101, must use Push to Exit labeled manual release device. DORMA push-button models PBEP, PB72, or PB73 are recommended.

EML320 Double Outswinging
Interior or Perimeter Doors without Mullion

EML310TP & EML320TP Electromagnetic Locks with Encoded Armature Plate

This intelligent magnet recognizes its own armature plate, preventing anyone from tricking the magnet with a separate plate. Each individually encoded armature plate is registered to match its own electromagnetic lock. Two independent relay outputs allow for lock status and alarm status for local and/or remote indication.

Features

- Up to 1500 lb (680 kg) holding force.
- Unrecognized armature plate alarm.
- Built-in time delay for instant release with adjustable re-lock.
- Alarm time setting.
- Individually encoded armature.

- LSS—Lock status sensor (includes LED).
- Field selectable voltage—12/24 VDC.
- Adjustable keyhole mounting.
- MOV surge protection.
- No residual magnetism.
- Self-drilling tek™ fasteners.
- Easy-access wiring cavity.
- Stabilizing 4-bolt mounting (8-bolt for EML320TP).
- **Adjustable re-lock time delay.**
- 628 brushed anodized aluminum lock body finish.

Listings & Approvals

- UL/CUL listed for use on fire doors rated up to 1 hr, UL294 Listed.
- ANSI/BHMA 156.23, Grade 1 listed.

EML320TP Double Outswinging Interior or Perimeter Doors without Mullion

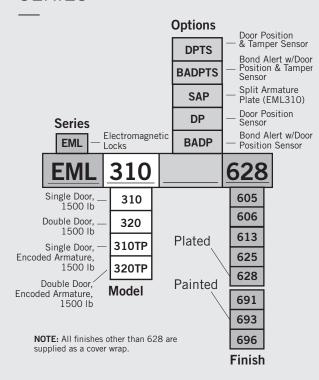EML310TP Single Outswinging Interior or Perimeter Doors

NOTE: When installed on access-controlled egress door assemblies, per NFPA101, must use Push to Exit labeled manual release device. DORMA push-button models PBEP, PB72, or PB73 are recommended.

HOW TO ORDER EML310/310TP & EML320/320TP SERIES

Options

Code	Description
DPTS	Door Position & Tamper Sensor
BADPTS	Bond Alert w/Door Position & Tamper Sensor
SAP	Split Armature Plate (EML310)
DP	Door Position Sensor
BADP	Bond Alert w/Door Position Sensor

Series

EML	Electromagnetic Locks

EML	310		628

Model

310	Single Door, 1500 lb
320	Double Door, 1500 lb
310TP	Single Door, Encoded Armature, 1500 lb
320TP	Double Door, Encoded Armature, 1500 lb

Finish

Plated

| 605 |
| 606 |
| 613 |
| 625 |
| 628 |

Painted

| 691 |
| 693 |
| 696 |

NOTE: All finishes other than 628 are supplied as a cover wrap.

EML310/310TP & EML320/320TP Finishes & Options

Finishes

Plated

- Brass: 605 (Bright) or 606 (Satin)
- Bronze: 613 (Oxidized Satin)
- Chrome: 625 (Bright) or 626 (Satin)

Painted

- Bronze: 691 (Dull)
- Black: 693
- Gold: 696 (Satin)

NOTE: Lock body supplied in 628. All other finishes supplied as a cover wrap.

Optional Mounting Accessories

- Angle brackets.
- Armature plate holders.
- Filler bars.
- Glass door brackets.
- Spacers.
- Top jamb **Z** bracket kits for inswinging doors.
- (EML310 only—reduces holding force by half).
- Armature bolts.
- **L** brackets.
- Door position sensor retrofit kit—**DPR15** (EML310) or **DPR25** (EML320).
- Split armature kit.
- Magnet housing cover wraps—**MCW310** or **MCW320** (standard with plated finishes).

Options

- **DP**—Door position sensor (retrofit kits available)
- **BA DP**—Bond alert/door position sensor combination
- **DP TS**—Door position sensor and tamper switch
- **BA DP TS**—Bond alert/door position sensor combination and tamper switch

Specifications	EML310/310TP	EML320/320TP
Housing Dimensions	1-5/8" D × 2-7/8" W × 10-1/2" L (41.3 mm × 73.0 mm × 266.7 mm) (including 1/4" (6 mm) mounting bracket)	1-5/8" D × 2-7/8" W × 21" L (41.3 mm × 73.0 mm × 533.4 mm) (including 1/4" (6 mm) mounting bracket)
Armature Plate Dimensions	Standard: 5/8" D × 2-3/8" W × 7-7/16" L* (15.9 mm × 60.3 mm × 188.9 mm)	Standard: 5/8" D × 2-3/8" W × 7-7/16" L* (15.9 mm × 60.3 mm × 188.9 mm)
Voltage	Field selectable 12/24 VDC Tolerance ±10%	Field selectable 12/24 VDC Tolerance ±10%
Power/Current Requirements	Max 0.28 A at 12 VDC Max 0.28 A at 24 VDC	Max 0.28 A at 12 VDC (each lock) Max 0.28 A at 24 VDC (each lock)
Holding Force	One-point locking (1500 lb)	Two-point locking (1500 lb each point)
Output Relays	BA (with LED)—SPDT 1.25 A @ 24 VDC DP—SPDT 0.20 A @ 12 VDC and 0.12 A @ 24 VDC	BA (with LED)—SPDT 1.25 A @ 24 VDC DP—SPDT 0.20 A @ 12 VDC and 0.12 A @ 24 VDC
Wiring Requirements	2 wires—power input; up to 4 wires output	2 or 4 wires—power input; up to 4 or 8 wires output
Adjustable Time Delay	0–110 seconds	0–110 seconds
Operating Temperature	14 to 140° F (–10 to 60° C)	14 to 140° F (–10 to 60° C)

NOTE: DORMA recommends frame reinforcement and our filtered, regulated DC voltage PS600 Series power supplies.

Function	Description
Bond Alert Sensor (BA)	Electronic field presence sensor for remote and local LED indication of reduced holding force caused by materials between magnet and plate, and unlocked device due to current loss.
Door Position Sensor (DP)	Ceramic magnet-reed type sensor for remote indication of door status (opened or closed, independent of local power); magnet embedded in armature for tamper resistance; reed switch inside electronic housing cavity for easy access.
LED Indicator	Included with BA options, the LED gives a local indication of lock status: red—unsecured; green—secured.
Low-Voltage Detection	Low voltage dramatically reduces electromagnetic lock holding force. This detection feature signals the BA relay/LED to activate (alarm) when voltage drops below 10.3 VDC (12 V input) or 20.5 VDC (24 V input).

DORMA EML375 SURFACE MICRO ELECTROMAGNETIC LOCKS

Ideal for small enclosures.

The compact size offers secure locking for cash drawers, machinery access covers, vending machines, filing cabinets and many other applications. 300 lb of holding force makes this electromagnetic lock incredibly strong for its size.

Features

- Up to 300 lb (136 kg) holding force.
- Low-profile design.
- Low energy consumption.
- Field selectable voltage—12/24 VDC.
- MOV surge protection.
- Hardened steel armature nut.
- 628 Brushed Anodized Aluminum finish.
- Contributes to U.S. Green Building Council, LEED® MR Credits 2.1, 4.1, 4.2, and 5.1.

Finishes

Plated Finishes
- Brass: 605 (Bright) or 606 (Satin)
- Bronze: 613 (Oxidized Satin)
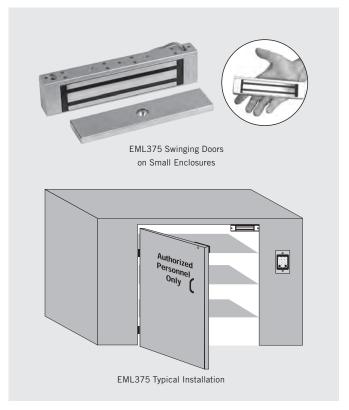- Chrome: 625 (Bright) or 626 (Satin)

Painted Finishes
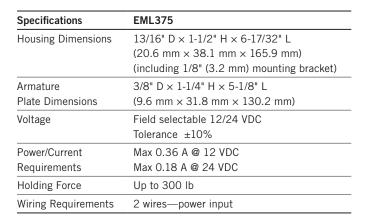- Bronze: 691 (Dull)
- Black: 693
- Gold: 696 (Satin)

NOTE: Lock body supplied in 628. All other finishes supplied as a cover wrap.
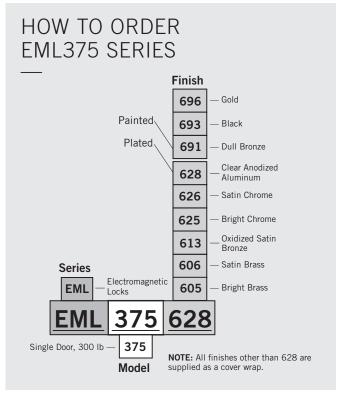
Optional Mounting Accessories
- Top Jamb **Z** Bracket Kits.
- Glass door brackets.
- Armature plate holder.
- Spacers.
- Magnet housing cover wraps— **MCW375** (standard with plated finishes).

EML375 Swinging Doors on Small Enclosures

EML375 Typical Installation

NOTE: When installed on access-controlled egress door assemblies, per NFPA101, must use Push to Exit labeled manual release device. DORMA push-button models PBEP, PB72, or PB73 are recommended.

Specifications	EML375
Housing Dimensions	13/16" D × 1-1/2" H × 6-17/32" L (20.6 mm × 38.1 mm × 165.9 mm) (including 1/8" (3.2 mm) mounting bracket)
Armature Plate Dimensions	3/8" D × 1-1/4" H × 5-1/8" L (9.6 mm × 31.8 mm × 130.2 mm)
Voltage	Field selectable 12/24 VDC Tolerance ±10%
Power/Current Requirements	Max 0.36 A @ 12 VDC Max 0.18 A @ 24 VDC
Holding Force	Up to 300 lb
Wiring Requirements	2 wires—power input

NOTE: DORMA recommends frame reinforcement and our filtered, regulated DC voltage PS600 Series power supplies.

HOW TO ORDER EML375 SERIES

Finish

696	Gold
693	Black
691	Dull Bronze
628	Clear Anodized Aluminum
626	Satin Chrome
625	Bright Chrome
613	Oxidized Satin Bronze
606	Satin Brass
605	Bright Brass

Painted — 696, 693, 691

Plated — 626, 625, 613, 606, 605

Series

EML — Electromagnetic Locks

EML 375 628

Single Door, 300 lb — 375

Model

NOTE: All finishes other than 628 are supplied as a cover wrap.

DORMA EMLSG380 WEATHER-RESISTANT ELECTROMAGNETIC GATE LOCK

—

The ideal solution for perimeter security and internal gates, with a rugged, stainless-steel housing.

The magnet's standard remote bond alert (RBA) indicates whether it is locked or unlocked, so you can easily monitor access from a remote location. The EMLSG380 features a built-in conduit fitting and an extra-long wire cable allowing easy wire access to an electrical box.

Features

- Up to 1500 lb (680 kg) holding force.
- Stainless steel housing.
- Low energy consumption.
- Field selectable voltage—12/24 VDC.
- MOV surge protection.
- 6-1/2 ft (1.9 m) wire cable.

- Conduit fitting inside diameter 1/2".
- Conduit fitting outside diameter 3/4".
- No residual magnetism.
- Built-in remote bond alert (RBA).
- Weather-resistant.
- Versatile face or bottom mounting.

Listings & Approvals

- UL/CUL listed for use on fire doors rated up to 1-1/2 hr.

Finishes

- Aluminum: 628 (Clear Anodized)
- Stainless: 630

Optional Mounting Accessories

- Top jamb **Z** bracket.
- Post bracket.

EMLSG380 Single or Double Swinging Gates and Exterior or Interior Sliding Gates
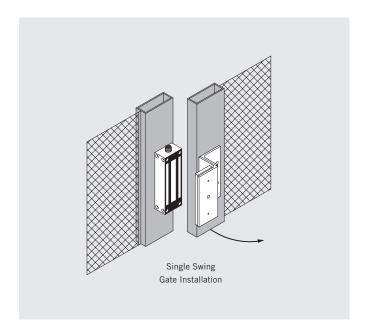
NOTE: When installed on access-controlled egress door assemblies, per NFPA101, must use Push to Exit labeled manual release device. DORMA push-button models PBEP, PB72, or PB73 are recommended.
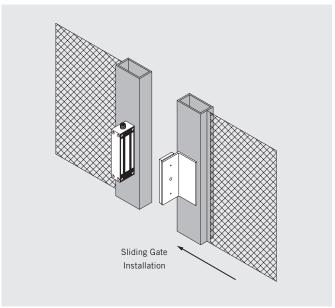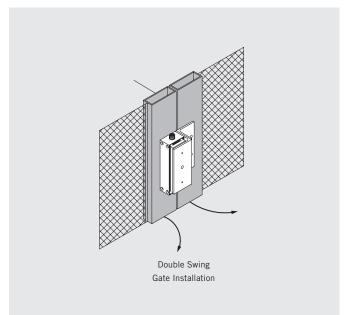
HOW TO ORDER EMLSG380 SERIES

—

Specifications	EMLSG380
Housing Dimensions	1-3/4" D × 2-1/2" H × 8-7/8" L (44.5 mm × 63.5 mm × 225.4 mm)
Armature Plate Dimensions	5/8" D × 2-3/8" H × 7-7/16" L (15.9 mm × 60.3 mm × 188.9 mm)
Voltage	Field selectable 12/24 VDC Tolerance ±10%
Power/Current Requirements	Max 0.48 A @ 12 VDC Max 0.24 A @ 24 VDC
Holding Force	Up to 1500 lb
Output Contacts	Remote bond alert (RBA) reed contacts—max 0.20 A @ 12 VDC and 0.12 A @ 24 VDC
Wiring Requirements	2 wires—power input; 2 wires—contact output
Operating Temperature	14° F to 140 °F (–10° C to 60° C)

NOTE: DORMA recommends frame reinforcement and our filtered, regulated DC voltage PS53 Series power supplies.

Function	Description
Remote Bond Alert (RBA)	A form C reed switch offers bond status remote indication capability.

Single Swing
Gate Installation

Sliding Gate
Installation

Double Swing
Gate Installation

NOTE: For proper operation, one side of the double gate pair should be stationary. Lock may not hold correctly if both gates swing freely.

DORMA EMLSG360 & EMLSG365 MORTISE ELECTROMAGNETIC LOCKS

—

Low-profile mortise locks for sliding doors.

The EMLSG360 mini electromagnetic lock is specifically designed to provide a secure hold (up to 750 lb holding force) on sliding doors.

The compact EMLSG365 micro electromagnetic lock, with up to 300 lb holding force, is designed as an even lower profile magnet for sliding doors, cabinets, and jewelry cases and small enclosures.

Features
- Up to 750 lb (340 kg) holding force (EMLSG360).
- Up to 300 lb (136 kg) holding force (EMLSG365).
- Low energy consumption.
- Field selectable voltage 12/24 VDC.
- MOV surge protection.
- Hardened steel armature nut.
- Built-in remote bond alert (RBA)—EMLSG360 only.
- No residual magnetism.
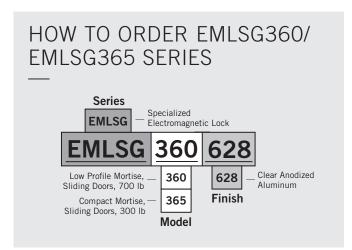- Low-profile design.

Finish
Aluminum: 628
(Clear Anodized)

EMLSG360 Mortise
for Sliding Doors

EMLSG365 Mortise
for Sliding Doors

EMLSG360/EMLSG365
Typical Installation

NOTE: When installed on access-controlled egress door assemblies, per NFPA101, must use Push to Exit labeled manual release device. DORMA push-button models PBEP, PB72, or PB73 are recommended.
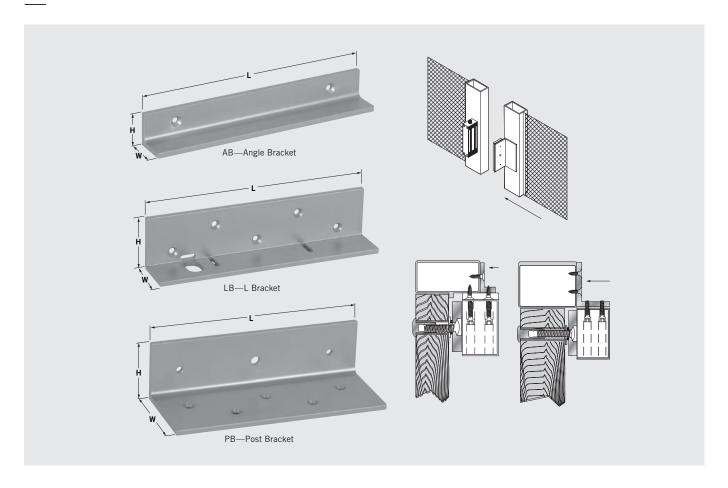
HOW TO ORDER EMLSG360/ EMLSG365 SERIES

—

Series

EMLSG — Specialized Electromagnetic Lock

| EMLSG | 360 | 628 |

Low Profile Mortise, — **360** / Sliding Doors, 700 lb

Compact Mortise, — **365** / Sliding Doors, 300 lb

628 — Clear Anodized Aluminum

Finish

Model

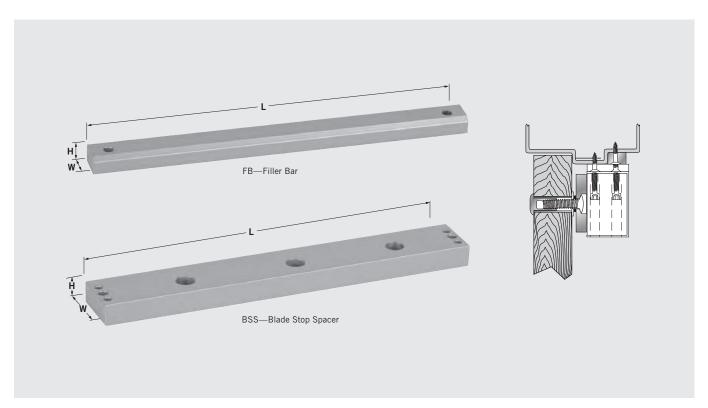| Specifications	EMLSG360	EMLSG365
Housing Dimensions	1-1/16" D × 1-1/2" H × 9" L (26.9 mm × 38.1 mm × 228.6 mm) (including 3/4" mounting tabs)	13/16" D × 1-11/32" H × 7-15/16" L (20.6 mm × 34.1 mm × 201.6 mm) (including 11/16" mounting tabs)
Armature Plate Dimensions	1/2" D × 1-1/2" H × 7-1/4" L (12.7 mm × 38.1 mm × 184.2 mm)	5/16" D × 1-1/4" H × 5-1/8" L (7.9 mm × 31.8 mm × 130.2 mm)
Voltage	Field selectable 12/24 VDC Tolerance ±10%	Field selectable 12/24 VDC Tolerance ±10%
Power/Current Requirements	Max 0.50 A @ 12 VDC Max 0.25 A @ 24 VDC	Max 0.40 A at 12 VDC Max 0.20 A at 24 VDC
Holding Force	One-point locking (750 lb)	One-point locking (300 lb)
Output Contacts	0.20 A @ 12 VDC and 0.12 A @ 24 VDC Dry output form C	N/A
Wiring Requirements	2 wires—power input; 2 wires relay output	2 wires—power input

NOTE: DORMA recommends frame reinforcement and our filtered, regulated DC voltage PS53 Series power supplies.

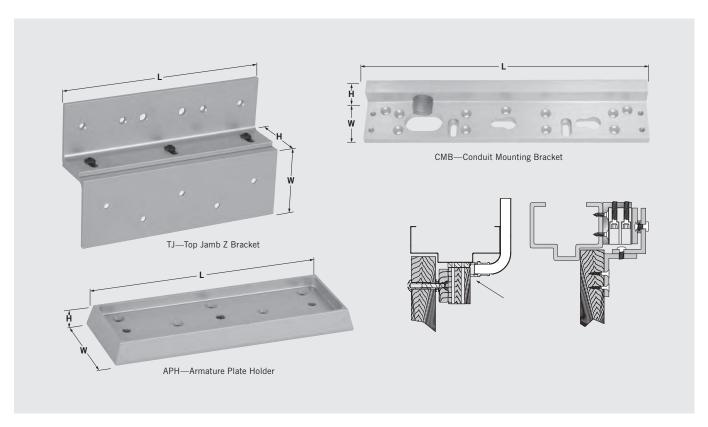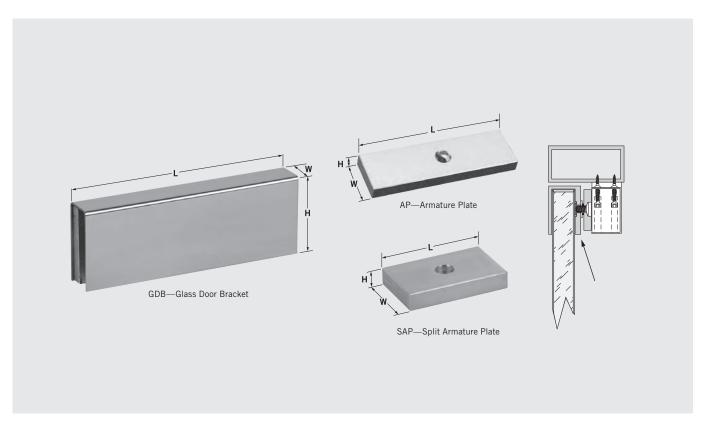| Function	Description
Remote Bond Alert (RBA)	A form C reed switch offers bond status remote indication capability (EMLSG360 only).

EML ACCESSORIES

AB—Angle Bracket

LB—L Bracket

PB—Post Bracket

Item	Description/Dimensions	Applicable Models	Available Finish (specify)
Angle Brackets	Required for narrow header or center-hung single-acting doors, when inadequate space is left for mounting. Ideal for narrow aluminum frames.		
AB11	1" H × 1" W × 10-1/2" L (25.4 mm × 25.4 mm × 267 mm)	EML310	628, 695
AB12	1-1/2" H × 1" W × 10-1/2" L (38 mm × 25.4 mm × 267 mm)	EML310	628, 695
AB13	1-1/2" H × 1-1/2" W × 10-1/2" L (38 mm × 38 mm × 267 mm)	EML310	628, 695
AB20	1" H × 1" W × 21" L (25.4 mm × 25.4 mm × 533 mm)	EML320	628, 695
AB21	1-1/2" H × 1" W × 21" L (38 mm × 25.4 mm × 533 mm)	EML320	628, 695
AB22	1-1/2" H × 1-1/2" W × 22" L (38 mm × 38 mm × 533 mm)	EML320	628, 695
AB710	1" H × 1" W × 9-3/8" L (25.4 mm × 25.4 mm × 238 mm)	EML371	628, 695
AB711	1-1/2" H × 1" W × 9-3/8" L (38 mm × 25.4 mm × 238 mm)	EML371	628, 695
AB712	1-1/2" H × 1-1/2" W × 9-3/8" L (38 mm × 38 mm × 238 mm)	EML371	628, 695
AB713	1-1/2" H × 2" W × 9-3/8" L (38 mm × 51 mm × 238 mm)	EML371	628, 695
AB720	1" H × 1" W × 18-3/4" L (25.4 mm × 25.4 mm × 476 mm)	EML372	628, 695
AB721	1-1/2" H × 1" W × 18-3/4" L (38 mm × 25.4 mm × 476 mm)	EML372	628, 695
AB722	1-1/2" H × 1-1/2" W × 18-3/4" L (38 mm × 38 mm × 476 mm)	EML372	628, 695
AB723	1-1/2" H × 2" W × 18-3/4" L (38 mm × 51 mm × 476 mm)	EML372	628, 695
L Brackets	Required when there is no space left on the header to mount the magnetic lock. Magnet mounts on bracket and bracket mounts on vertical face of head frame.		
LB10	2-1/2" H × 2" W × 10-1/2" L (63.5 mm × 51 mm × 267 mm)	EML310	628, 695
LB20	2-1/2" H × 2" W × 21" L (63.5 mm × 51 mm × 533 mm)	EML320	628, 695
Post Bracket	Used to mount armature plate to sliding gate.		
PB80	3-1/2" H × 2-1/2" W × 8-7/8" L (89 mm × 51 mm × 225.5 mm)	EMLSG380	628, 695

FB—Filler Bar

BSS—Blade Stop Spacer

Item	Description/Dimensions	Applicable Models	Available Finish (specify)
Filler Bars	Required when frame stop is narrower than 2" (50.8).		
FB11	1/8" H × 3/4" W × 10-1/2" L (3.2 mm × 19 mm × 267 mm)	EML310	628
FB12	1/4" H × 3/4" W × 10-1/2" L (6.4 mm × 19 mm × 267 mm)	EML310	628, 695
FB14	1/2" H × 3/4" W × 10-1/2" L (12.7 mm × 19 mm × 267 mm)	EML310	628, 695
FB14N	1/2" H × 5/8" W × 10-1/2" L (12.7 mm × 15.9 mm × 267 mm)	EML310	628, 695
FB15	5/8" H × 3/4" W × 10-1/2" L (15.9 mm × 19 mm × 267 mm)	EML310	628, 695
FB21	1/8" H × 3/4" W × 21" L (3.2 mm × 19 mm × 533 mm)	EML320	628, 695
FB22	1/4" H × 3/4" W × 21" L (6.4 mm × 19 mm × 533 mm)	EML320	628, 695
FB24	1/2" H × 3/4" W × 21" L (12.7 mm × 15.9 mm × 533 mm)	EML320	628, 695
FB24N	1/2" H × 5/8" W × 21" L (12.7 mm × 15.9 mm × 533 mm)	EML320	628, 695
FB25	5/8" H × 3/4" W × 21" L (15.9 mm × 19 mm × 533 mm)	EML320	628, 695
FB712	1/4" H × 3/4" W × 9-3/8" L (6.4 mm × 19 mm × 238 mm)	EML371	628, 695
FB713	3/8" H × 3/4" W × 9" L (9.5 mm × 19 mm × 229 mm)	EML371	628, 695
FB714	1/2" H × 3/4" W × 9-3/8" L (12.7 mm × 19 mm × 238 mm)	EML371	628, 695
FB715	5/8" H × 3/4" W × 9-3/8" L (15.9 mm × 19 mm × 238 mm)	EML371	628, 695
FB722	1/4" H × 3/4" W × 18-3/4" L (6.4 mm × 19 mm × 476 mm)	EML372	628, 695
FB724	1/2" H × 3/4" W × 18-3/4" L (12.7 mm × 19 mm × 476 mm)	EML372	628, 695
FB725	5/8" H × 3/4" W × 18-3/4" L (15.9 mm × 19 mm × 476 mm)	EML372	628, 695
Blade Stop Spacers	Mounting plate spacers are used to lower the magnet in order to align correctly with armature plate.		
BSS14	1/2" H × 1-1/2" W × 10-1/2" (12.7 mm × 38 mm × 267 mm)	EML310	628, 695
BSS15	5/8" H × 1-1/2" W × 10-1/2" L (15.9 mm × 38 mm × 267 mm)	EML310	628, 695
BSS24	1/2" H × 1-1/2" W × 21" L (12.7 mm × 38 mm × 533 mm)	EML320	628, 695
BSS25	5/8" H × 1-1/2" W × 21" L (15.9 mm × 38 mm × 533 mm)	EML320	628, 695
BSS714	1/2" H × 1" W × 9-3/8" L (12.7 mm × 38 mm × 238 mm)	EML371	628, 695
BSS715	5/8" H × 1" W × 9-3/8" L (15.9 mm × 38 mm × 238 mm)	EML371	628, 695
BSS724	1/2" H × 1" W × 18-3/4" L (12.7 mm × 38 mm × 238 mm)	EML372	628, 695
BSS725	5/8" H × 1" W × 18-3/4" L (15.9 mm × 38 mm × 238 mm)	EML372	628, 695

TJ—Top Jamb Z Bracket

CMB—Conduit Mounting Bracket

APH—Armature Plate Holder

Item	Description/Dimensions	Applicable Models	Available Finish (specify)
Top Jamb Z Brackets	Required for inswinging doors. Magnet mounts on vertical face of head frame and bracket mounts to door face. Bracket allows horizontal adjustment of armature plate. Mounted on pull side of door.		
TJ10	Top Jamb Bracket	EML310	628
TJ20	Top Jamb Double Bracket	EML320	628
TJ71	Top Jamb Bracket	EML371	628
TJ72	Top Jamb Double Bracket	EML372	628
TJ75	Top Jamb Bracket	EML375	628
TJ80	Top Jamb Bracket	EMLSG380	628
Conduit Mounting Bracket	Used anywhere surface mounted conduit is required to run wires to the face of the magnetic lock.		
CMB10	1" D × 2-11/64" H × 10-9/16" L (25.4 mm × 68.3 mm × 268.3 mm)	EML310	628
Armature Plate Holders	The armature plate holder is used when the door cannot accommodate armature according to the standard mounting hardware procedures. The holder mounts on the face of the door and the armature plate is fastened to holder. Available for standard armature and DSR armatures.		
APH10	Armature Plate Holder	EML310	628, 695
APH15	Armature Plate Holder for DP Option	EML310	628, 695
APH20	Armature Plate Holder	EML320	628, 695
APH25	Armature Plate Holder for DP Option	EML320	628, 695
APH71	Armature Plate Holde	EML371	628, 695
APH72	Armature Plate Holder	EML372	628, 695
APH75	Armature Plate Holder	EML375	628, 695

GDB—Glass Door Bracket

AP—Armature Plate

SAP—Split Armature Plate

Item	Description/Dimensions	Applicable Models	Available Finish (specify)
Glass Door Brackets	Required for glass doors without mounting rails. Comes complete with rubber shim to protect glass. Specify 1/2" or 3/4" (12.7 mm or 19.1 mm) for glass thickness.		
GDB14	1/2" (12.7 mm) Thick Glass Door	EML310	629
GDB16	3/4" (19.1 mm) Thick Glass Door	EML310	629
GDB24	1/2" (12.7 mm) Thick Glass Door	EML320	629
GDB26	3/4" (19.1 mm) Thick Glass Door	EML320	629
GDB714	1/2" (12.7 mm) Thick Glass Door	EML371	629
GDB716	3/4" (19.1 mm) Thick Glass Door	EML371	629
GDB724	1/2" (12.7 mm) Thick Glass Door	EML372	629
GDB726	3/4" (19.1 mm) Thick Glass Door	EML372	629
GDB754	1/2" (12.7 mm) Thick Glass Door	EML375	629
GDB759	3/4" (19.1 mm) Thick Glass Door	EML375	629
Split Armature Plate	Allows use of EML310 single magnet with pair of doors. Cannot be used with sensor options. **NOTE:** Holding force is reduced when split armature is used.		
SAP	5/8" (15.9) Thick, includes Mounting Hardware	EML310	628
Armature Plates	**NOTE:** For double magnets order two armature plates. Required for narrow header or center-hung single-acting doors, when inadequate space is left for mounting. Ideal for narrow aluminum frames.		
AP02	5/8" (15.9 mm) Thick	EML310, EML320	628
AP03	3/8" (9.5 mm) Thick	EMLSG360, EML371, EML372	628
AP04	5/16" (7.9 mm) Thick	EMLSG365, EML375	628
AP21	5/8" (15.9 mm) Thick, for DP Option	EML310, EML320	628

DORMA EMDE DELAYED EGRESS ELECTROMAGNETIC LOCKS

—

All-in-one lock with a built-in sensor detects pressure applied to outward swinging doors.

Built-in sounder and voice make this ideal for applications requiring loss prevention, life safety, and traffic control. The EMDE series is unique in that there is no need to replace existing door hardware making this an easy and affordable delayed egress solution.

Features

- 1200 lb (544 kg) holding force.
- All-in-one delayed egress lock.
- Built in sensor detects when pressure is applied to outward swinging doors—no need to replace existing door hardware.
- Field selectable 15 or 30 second release delay with field selectable 0 to 3 second nuisance delay.
- Provision for IBC, SBC, NFPA101, UBC, BOCA or NBC of Canada compliance.
- Unique highly visible Red/ Green light panel indicates status of door (local).

- Available with built-in sounder.
- Includes KS817 keyswitch for reset and override, 15 second building code sign; base unit includes external sounder.
- Built-in bond alert (BA) sensor feature indicates that the door is closed and bonded.
- Field selectable to meet a variety of building codes.
- Dry contact SPDT and DPDT relays provided for local and/ or remote monitoring.
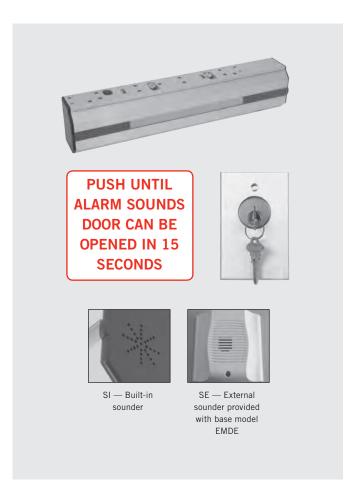- Autosensing voltage from 12 to 24 VDC.
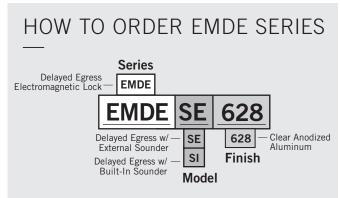
Listings & Approvals

- UL/CUL listed for use on fire doors rated up to 1-1/2 hr.

Optional Accessories

- Spacers.
- Angle bracket.
- **L** bracket.
- Filler bars.
- Power supply.
- 30 second building code sign.

PUSH UNTIL ALARM SOUNDS DOOR CAN BE OPENED IN 15 SECONDS

SI — Built-in sounder

SE — External sounder provided with base model EMDE

HOW TO ORDER EMDE SERIES

—

Delayed Egress Electromagnetic Lock —

Series

EMDE

EMDE | **SE** | **628**

Delayed Egress w/ — External Sounder | **SE**

Delayed Egress w/ — Built-In Sounder | **SI**

628 — Clear Anodized Aluminum

Finish

Model

Specifications	EMDE
Housing Dimensions	Base Unit: 2-1/8" D × 2-7/8" H × 10-13/16" L (54.0 mm × 73.0 mm × 274.6 mm) Base Unit with Sound Unit: 2-1/8" D × 2-7/8" H × 11-3/4" L (54.0 mm × 73.0 mm × 298.5 mm) Base Unit with External Sounder: 2-1/8" D × 2-7/8" H × 14" L (54.0 mm × 73.0 mm × 355.6 mm) (including 1/4" (6 mm) mounting bracket)
Armature Plate Dimensions	5/8" D × 2-3/8" H × 7-7/16" L (15.9 mm × 60.3 mm × 188.9 mm)
Voltage	Auto sensing voltage 12/24 VDC Tolerance ±10%
Power/Current Requirements	Base Unit with external sounder: Max 0.61 A @ 12 VDC Max 0.32 A @ 24 VDC
Holding Force	1200 lb
Operating Temperature	Not for use in outdoor environments. Circuit board operating temperature 14° F to 140 °F (−10° C to 60° C)

NOTE: This product is intended for use with Special Locking Arrangements which are installed in accordance with the manufacturer's installation and operation instructions, the Life Safety Code, NFPA 101 of the National Fire Protection Association and the local authority having jurisdiction. Power for this unit is to be provided by a Listed Class 2 power supply when designated as a Special Locking Arrangement (FWAX). DORMA recommends frame reinforcement and our filtered, regulated DC voltage PS53 Series power supplies.

Function	Description
Nuisance Delay	Accommodates accidental triggering with settings of 0 to 3 seconds as defined by the local building code.
Release Delay	Set at 15 seconds, this delay protects against unauthorized egress. It may be extended to 30 seconds with the approval of the local Authority Having Jurisdiction.
Light Panel	This full length feature is a highly visible red and green status indicator.
Sound Module	This built-in sounder pulses slowly during the short nuisance delay and sounds steady through the release delay until the door unlocks. If forced open before the set release delay has lapsed, the sounder cannot be turned off without switching the system power off.

NOTE: All installations must be approved by the local Authority Having Jurisdiction (AHJ)

EMSL-2000 MICRO SHEAR & EMSL-2700 HIGH SHEAR LOCKS
—

The EMSL-2000 Series Micro Shear and EMSL-2700 Series High Shear locks use an innovative locking design that incorporates a special alloy steel for greater durability and strength.

The field adjustment capabilities of these advanced locks ensure proper operation after final installation alignment. The EMSL Series shear locks also offer a field adjustable 1 to 5 second auto-relock delay timer.

The patented EMSL-2000 Series Micro Shear design, with models 2061 and 2062, has surpassed 2000 pounds tensile holding strength on laboratory tests and will withstand forces that will deform a door before the lock will separate. The 2765 and 2766 High Shear models surpass 2700 pounds. This design combines aesthetics, high security, and performance. With the most advanced features in shear lock design, the EMSL-2000 and EMSL-2700 Series create the ultimate in fail-safe performance and security.

Lateral & Vertical Alignment Adjustment
The exclusive lateral armature alignment adjustment can compensate for minor warped or misaligned doors. Optimum vertical armature positioning is also obtained with the field adjustable design to help insure positive relocking of the door without the use of shims.

Reliable performance is inherent in this design for high frequency openings.

Models Available with Built-in Field Adjustable Auto-Relock Switch
The model 2062 and 2766 shear locks fit in 1-1/4" face frames and are equipped with an auto-relock switch and external field adjustable time delay of 1–5 seconds after the door is closed. The 2061 and 2765 fit in a 1-3/4" face frame. The 2061 and 2765 are equipped with a built-in auto relock switch and field adjustable time delay that suspends relocking 1–5 seconds after door closure. This feature ensures that the door is at rest and fully closed to obtain optimum alignment before the lock is energized.

Single or Center Hung Single Acting
Models are available for use with single- or single acting center hung doors. Several mounting assemblies are available to meet varying door and frame applications, such as aluminum, hollow metal, glass, and wood doors. These locks are also ideally suited for narrow stile glass entrance doors and frames.

Positive Fail-Safe Security
The shear locks are inherently fail-safe. When power is off, the unit is unlocked. They are ideal for fire/life safety applications and are compatible with fire alarm systems, access controls, mantraps, automatic doors, and interlock systems.

Complete Monitoring Capabilities
Built-in door position and lock status sensors are available for interface with control and annunciator panels or other signaling applications.

Features
- Lateral and vertical field adjustment allows precise adjustment of lock and armature.
- Special alloy steel shear stops.
- Magnetic force is not compromised due to profiling of the magnet or armature.
- Built-in field adjustable auto-relock switch.
- Models 2061 and 2765 have an external field adjustable auto-relock delay timer.
- Compact design allows installation in 1-1/4" or 1-3/4" face frames.
- Operates on 12 VDC or 24 VDC.
- Fail-safe function.
- Built-in voltage kickback protection.
- Bond sensor and door position monitoring options without need for additional holes in the frame.
- Compatible with single acting aluminum, hollow metal, wood, or glass doors.

Listings & Approvals
UL/CUL listed under their continuing reinspection programs.

GWXT—Auxiliary Locks
CVXJ—Burglary-Resistant, Electrically Operated Door Locking Mechanism

Electrical Specifications
- Voltage: Dual, 12/24 VDC (field selectable).
- Wiring: Inboard Terminals.
- Surge Protection: Built-in Surge Protection.

Finishes

Standard Finishes
- Surface Housing— Aluminum: 628 (Anodized)
- Mortise Housing— Nickel: 619 (Satin)
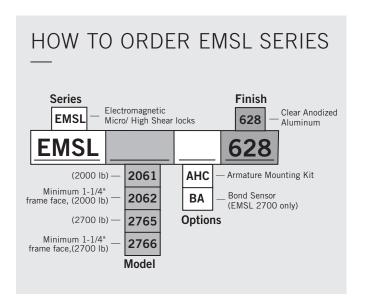
Optional Sprayed Finishes
- Bronze: 710 (Dark)
- Black: 711

Optional Plated Finishes
- Brass: 605 (Bright) or 606 (Satin)
- Bronze: 611 (Bright) or 612 (Satin)
- Chrome: 625 (Bright) or 626 (Satin)

Mechanical Specifications

Model	Holding Force	Voltage/Current	Lock Dimensions	Armature Dimensions
2061	2000 lb	650 MA @ 12 VDC/ 350 MA @ 24 VDC	8" L × 1-1/2" W × 1-5/8" D	8-7/16" L × 1-1/2" W × 7/8" D
2062			8" L × 1-1/2" W × 1-1/8" D	8-7/16" L × 1-1/2" W × 7/8" D
2765	2700 lb	800 MA @ 12 VDC/ 400 MA @ 24 VDC	10-7/16" L × 1-1/2" W × 1-5/8" D	11" L × 1-1/2" W × 7/8" D
2766			10-7/16" L × 1-1/2" W × 1-1/8" D	11" L × 1-1/2" W × 7/8" D

HOW TO ORDER EMSL SERIES

—

Series
EMSL — Electromagnetic Micro/ High Shear locks

Finish
628 — Clear Anodized Aluminum

EMSL ___ ___ 628

(2000 lb) — **2061**
Minimum 1-1/4" frame face, (2000 lb) — **2062**
(2700 lb) — **2765**
Minimum 1-1/4" frame face,(2700 lb) — **2766**
Model

AHC — Armature Mounting Kit
BA — Bond Sensor (EMSL 2700 only)
Options

Models

2061—Built-in auto-relock and time delay. Lock and armature are mortised. Single or double-acting (2000 lb).
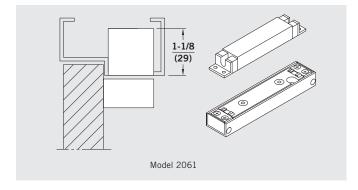
2061S—Surface mount push side of door (2000 lb).

2061TJ—Surface mount pull side of door (2000 lb).
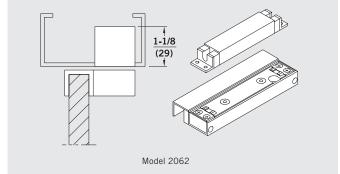
2062—Built-in auto-relock and time delay. Lock and armature are mortised. Minimum 1-1/4" frame face. Single or double-acting (2000 lb).

2062SC—Semi-concealed push side of door. Lock is mortised.

2062SC × GBRKT—Semi-concealed with glass door bracket (GBRKT). Lock is mortised (2000 lb).

2765—Built-in auto-relock and time delay. Lock and armature are mortised. Single or double-acting (2700 lb).

2766—Built-in auto-relock and external time delay. Minimum 1-1/4" frame face. Single or double-acting (2700 lb).

1-1/8 (29)

Model 2061

1-1/8 (29)

Model 2062

Options

AHC—Armature mounting kit for aluminum or steel doors with 7/8" to 1-1/8" deep web depth; also for wood doors.

FC—Armature mounting kit for field prepared horizontal mounting in steel doors with a flush edge.

AC—Armature mounting kit for aluminum doors with 1-15/16" deep web depth.

DPS-1—Door Position Switch SPDT 250 mA max.

NOTE: Add suffix **M** for micro shear lock armatures, i.e. AHCM

ATR—Aluminum top rail armature bracket for leading edge adjustments.

BA—Bond Alert Sensor SPDT 250 mA max (not available on 2062 or 2766).

L-3—External LED that mounts separately through the frame.

BR64XL—Rectifier for AC input.

WDRBM—Wood door reinforcement box (micro shear).

WDRB—Wood door reinforcement box (high shear).

When incorporating the shear locks into a system with other DORMA electrical components, DORMA's Technical Services Department offers assistance with point to point wiring diagrams. Please contact them with specific requirements.

PUSH
BUTTONS

33–35

- Blue & Red Mushroom
- Illuminated

BLUE & RED MUSHROOM PUSH BUTTONS

—

DORMA offers push buttons for a variety of access control solutions.

These push buttons are available in a selection of functions and options. Momentary, maintained, or time-delay switches are available.

Blue Button Specifications
- **PBBH**—1-3/4" (44.5 mm) diameter mushroom button
- **PBHO**—Extra Large 2-3/8" (60.3 mm) diameter blue mushroom button

Red Button Specifications
- **PBRE**—1-3/4" (44.5 mm) diameter mushroom button
- **PBEO**—Extra Large 2-3/8" (60.3 mm) diameter blue mushroom button

Switch Specifications
- **MO**—1 MO SPST NO, 1 MO SPST NC, 10 A @ 24 VDC
- **MA**—1 MA SPST NO, 1 MA SPST NC, 10 A @ 24 VDC

Blue/Red Timer Accessory Specifications
- Adjustable: MO SPST NO/NC ADJ 1–30 sec, 2 A @ 30 VDC
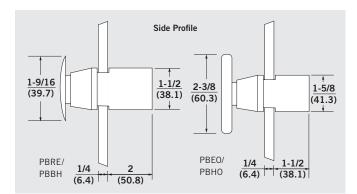- Fixed: MO SPST NO/NC Fixed 30 sec, 2 A @ 30 VDC

Finishes
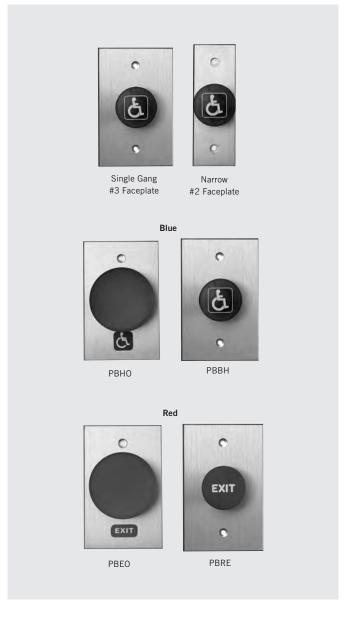- Aluminum: 628 (Clear Anodized)
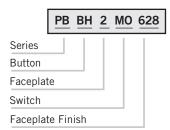- Bronze: 710 (Dark Anodized)

Screws
All switches include tamper proof screws and driver bit.

Mounting Options
- All switches below are surface mount.
- Accessory box available for single gang surface mount.

Single Gang #3 Faceplate

Narrow #2 Faceplate

Blue

PBHO

PBBH

Red

PBEO

PBRE

Side Profile

1-9/16 (39.7)		1-1/2 (38.1)	
		2-3/8 (60.3)	1-5/8 (41.3)

PBRE/PBBH   1/4 (6.4)   2 (50.8)

PBEO/PBHO   1/4 (6.4)   1-1/2 (38.1)

| PB | BH | 2 | MO | 628 |

Series
Button
Faceplate
Switch
Faceplate Finish

Available Items

Item	Color	Label	Diameter	Faceplate	Switch	Faceplate Finish
Blue Mushroom Push Buttons						
PB BH2 MA 628	Blue	Handicap	1-9/16"	Narrow	Maintained	Brushed Aluminum
PB BH2 MO 628	Blue	Handicap	1-9/16"	Narrow	Momentary	Brushed Aluminum
PB BH2 MA 710	Blue	Handicap	1-9/16"	Narrow	Maintained	Dark Bronze
PB BH2 MO 710	Blue	Handicap	1-9/16"	Narrow	Momentary	Dark Bronze
PB BH3 MA 628	Blue	Handicap	1-9/16"	Single Gang	Maintained	Brushed Aluminum
PB BH3 MO 628	Blue	Handicap	1-9/16"	Single Gang	Momentary	Brushed Aluminum
PB BH3 MA 710	Blue	Handicap	1-9/16"	Single Gang	Maintained	Dark Bronze
PB BH3 MO 710	Blue	Handicap	1-9/16"	Single Gang	Momentary	Dark Bronze
PB HO3 MA 628	Blue	Handicap	2-3/8"	Single Gang	Maintained	Brushed Aluminum
PB HO3 MO 628	Blue	Handicap	2-3/8"	Single Gang	Momentary	Brushed Aluminum
PB HO3 MA 710	Blue	Handicap	2-3/8"	Single Gang	Maintained	Dark Bronze
PB HO3 MO 710	Blue	Handicap	2-3/8"	Single Gang	Momentary	Dark Bronze
Red Mushroom Push Buttons						
PB RE2 MA 628	Red	Exit	1-9/16"	Narrow	Maintained	Brushed Aluminum
PB RE2 MO 628	Red	Exit	1-9/16"	Narrow	Momentary	Brushed Aluminum
PB RE2 MA 710	Red	Exit	1-9/16"	Narrow	Maintained	Dark Bronze
PB RE2 MO 710	Red	Exit	1-9/16"	Narrow	Momentary	Dark Bronze
PB RE3 MA 628	Red	Exit	1-9/16"	Single Gang	Maintained	Brushed Aluminum
PB RE3 MO 628	Red	Exit	1-9/16"	Single Gang	Momentary	Brushed Aluminum
PB RE3 MA 710	Red	Exit	1-9/16"	Single Gang	Maintained	Dark Bronze
PB RE3 MO 710	Red	Exit	1-9/16"	Single Gang	Momentary	Dark Bronze
PB E03 MA 628	Red	Exit	2-3/8"	Single Gang	Maintained	Brushed Aluminum
PB E03 MO 628	Red	Exit	2-3/8"	Single Gang	Momentary	Brushed Aluminum
PB E03 MA 710	Red	Exit	2-3/8"	Single Gang	Maintained	Dark Bronze
PB E03 MO 710	Red	Exit	2-3/8"	Single Gang	Momentary	Dark Bronze

Accessories	
Item	**Description**
TD-ADJ	Field Selectable Timer—0–30 seconds—wire inline
TD-FIX	Fixed Timer—30 seconds—wire inline
SBX	Surface mounting box, single gang—PBBH2 MO 630 SBX

ILLUMINATED PUSH BUTTONS
—

DORMA offers illuminated push buttons with LED or incandescent bulbs for a variety of access control solutions.

Square, Illuminated push buttons with interchangable messages including:

- Red Exit
- Green Exit
- Red Push to Exit
- Blue Handicap Symbol
- Spanish of above

Button Specifications

- **PB75**—1"×1" square push button
- **PB72 & PB73**—2" ×2" square push buttons

Switch Specifications

- **PB75-MO**—1 MO SPST NO, 1 MO SPST NC, 6 A @ 125 VAC

- **PB72 & PB73**—1 MO SPST NO, 1 MO SPST NC, 10 A @ 125 VAC

Timer Accessory Specifications

- Adjustable: MO SPST NO/NC ADJ 1–30 sec, 2 A @ 30 VDC
- Fixed: MO SPST NO/NC Fixed 30 sec, 2 A @ 30 VDC

Finishes

- Aluminum: 628 (Clear Anodized)
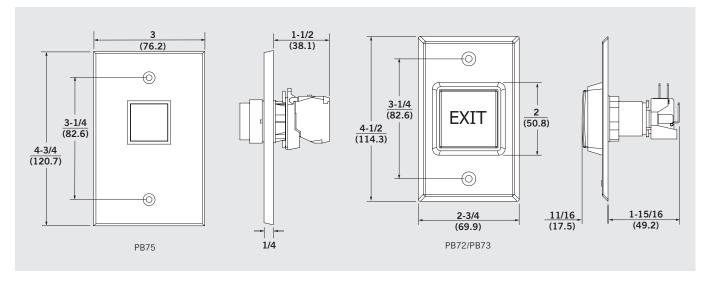- Bronze: 710 (Dark Anodized)

Screws

All switches include tamperproof screws and driver bit.

Mounting Options

- All switches below are surface mount.
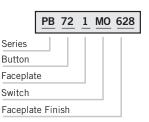- Accessory box available below for single gang surface mount.

PB72/PB73

PB75

PB75

PB72/PB73

Available Items

Item	Button	Faceplate	Switch	Faceplate Finish
PB 721 MO 630	2" × 2"	Single Gang	Momentary	Brushed Stainless
PB 731 MO 630	2" × 2" LED	Single Gang	Momentary	Brushed Stainless
PB 752 MO 628	1" × 1" LED	Narrow	Momentary	Brushed Aluminum
PB 752 MO 710	1" × 1" LED	Narrow	Momentary	Dark Bronze

Accessories	
Item	**Description**
TD-ADJ	Field Selectable Timer—0–30 seconds—wire inline
TD-FIX	Fixed Timer—30 seconds—wire inline
SBX	Surface mounting box, single gang—PB721 MO 630 SBX

PB	72	1	MO	628

Series
Button
Faceplate
Switch
Faceplate Finish

KEY
SWITCHES

—

37–38

- **KS5**
- **KS8**

DORMA KS5 & KS8 SERIES KEY SWITCHES

—

DORMA KS5 and KS8 tamper-resistant key switches for authorized control.

These sleek, beveled-edge key switches are designed for a variety of applications including access control, automatic gate operation, alarm shunt, and alarm reset. Tamper-resistant screws and a special driver are included with the key switch to prevent unauthorized removal of the faceplate. The cover plate and switch mounting design can be used with most standard and recessed electrical utility boxes.

Features

- 1/4" thick extruded aluminum faceplate with beveled edges.
- #6-32 stainless steel tamper-resistant spanner head screws and driver included.
- Conventional mortise cylinder included.
- Small format interchangeable core mortise cylinders available.
- Cylinder recessed into the face plate for tamper-resistant mounting.
- Cylinder type, keyway, and keying configurable into facility master key system.

Finishes

- Aluminum: 628 (Clear Anodized)
- Bronze: 710 (Dark Anodized)

Options

Switch Functions

- **01**—1 MA SPDT
- **02**—1 MO SPDT
- **03**—MA DPDT
- **04**—MO DPDT
- **07**—2 MO SPDT
- **08**—1 MA SPDT, 1 MO SPDT
- **17**—2 MO SPDT, Reset/Bypass

Electrical Specifications

3A @ 125 VAC, 1A @ 250 VAC

Timer Options

- **EF**—30 sec fixed timer
- **EA**—30 sec adjustable timer

Key Switch Options

- **L1**—1 bicolor LED (red/green)
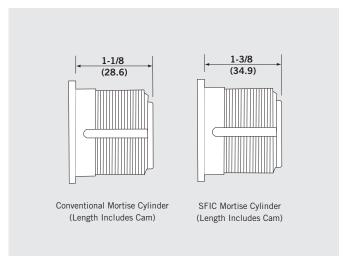
Mounting Options

- **SBX**—Surface mount box, single gang
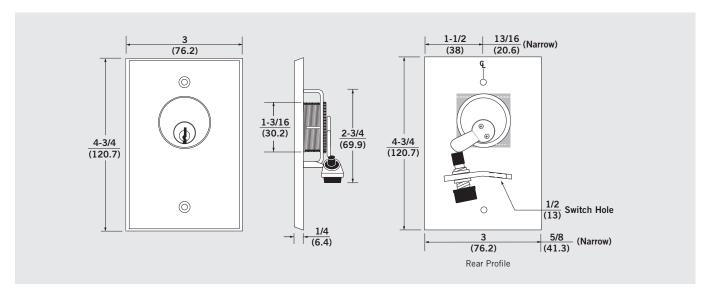- **RBX**—Recess mount box, single gang

DORMA Mortise Cylinders
for use with all single key switches

- **90X11SC118**—6-pin
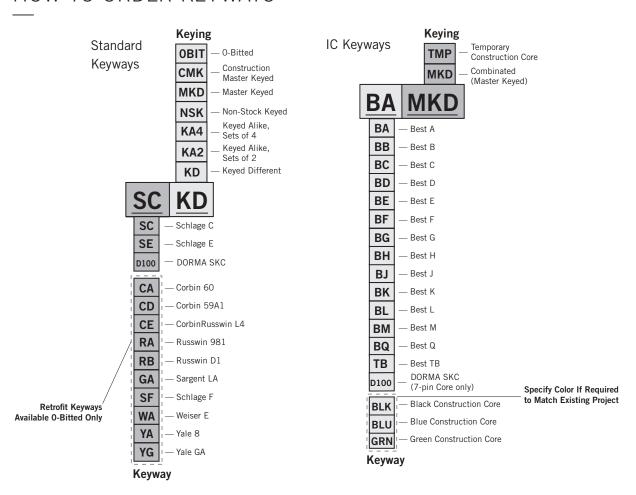- **96D11BA138**—6-pin SFIC
- **97D11BA138**—7-pin SFIC

KS8 Single Gang
Aluminum

KS5 Narrow
Aluminum

1-1/8 (28.6)

1-3/8 (34.9)

Conventional Mortise Cylinder
(Length Includes Cam)

SFIC Mortise Cylinder
(Length Includes Cam)

3 (76.2)

4-3/4 (120.7)

1-3/16 (30.2)

2-3/4 (69.9)

1/4 (6.4)

1-1/2 (38)

13/16 (20.6) **(Narrow)**

4-3/4 (120.7)

1/2 (13) **Switch Hole**

3 (76.2)

5/8 (41.3) **(Narrow)**

Rear Profile

HOW TO ORDER KS SERIES

—

Timer Options[2]

Key Switch Options

Mounting Box

Series

Key Switch Actuator — **KS**

30 Sec Adjustable — **EA**

30 Sec Fixed — **EF**

L2 — 2 Bicolor LEDs (Red/Green)

L1 — Bicolor LED (Red/Green)

SBX — Surface Mount, Single Gang

RBX — Recess Mount, Single Mount

| KS | | | | | 628 | | D | XXXX |

Narrow Aluminum[1] — **5**

Single Gang Aluminum — **8**

Faceplate Options

01 — MA SPDT

02 — MO SPDT

03 — MA DPDT

04 — MO DPDT

07 — 2 MO SPDT

08 — 1 MO SPDT/ 1 MA SPDT

17 — 2 MO SPDT Reset/Bypass

Switch Function

628 — Clear Anodized Aluminum

710 — Satin Dark Bronze Aluminum

Finish

C — SFIC

D — Conventional Cylinder

J — Less SFIC

L — Less Cylinder

T — Temporary SFIC

R — Schlage FSIC (less core)

Cylinder Type[3]

See Below for Keying Options

1. Faceplate option 5 only available with switch functions 01 and 02.

2. Timer options only available with switch function 02.

HOW TO ORDER KEYWAYS

—

Standard Keyways

Keying

0BIT — 0-Bitted

CMK — Construction Master Keyed

MKD — Master Keyed

NSK — Non-Stock Keyed

KA4 — Keyed Alike, Sets of 4

KA2 — Keyed Alike, Sets of 2

KD — Keyed Different

| SC | KD |

SC — Schlage C

SE — Schlage E

D100 — DORMA SKC

CA — Corbin 60

CD — Corbin 59A1

CE — CorbinRusswin L4

RA — Russwin 981

RB — Russwin D1

GA — Sargent LA

SF — Schlage F

WA — Weiser E

YA — Yale 8

YG — Yale GA

Retrofit Keyways Available 0-Bitted Only

Keyway

IC Keyways

Keying

TMP — Temporary Construction Core

MKD — Combinated (Master Keyed)

| BA | MKD |

BA — Best A

BB — Best B

BC — Best C

BD — Best D

BE — Best E

BF — Best F

BG — Best G

BH — Best H

BJ — Best J

BK — Best K

BL — Best L

BM — Best M

BQ — Best Q

TB — Best TB

D100 — DORMA SKC (7-pin Core only)

BLK — Black Construction Core

BLU — Blue Construction Core

GRN — Green Construction Core

Specify Color If Required to Match Existing Project

Keyway

ACCESSORIES

40–49

- Sounders
- Exterior/Interior Digital Keypads
- Mechanical Switch Bar
- Power Transfer Devices
- Timers/Relays
- C400 Desktop Consoles
- Desk Switches
- Monitor Strikes

DORMA SOUNDERS
—

DORMA offers alerts and sounders for a variety of access control solutions.

For remote or local monitoring, DORMA audible alert sounders are available in single-gang (39033) and narrow (39032) versions. The easy to install 3914 sounders are ideal for delayed egress applications and available in interior or exterior (3914W) models.

Features

39032/39033 Audible Alert

▪ Continuous or intermittent output from 80–96 db, field-selectable.

▪ 1/4" thick extruded aluminum faceplate with beveled edges.

▪ #6-32 stainless steel tamper-resistant spanner head screws and driver include.

▪ Narrow model (39032) easy to install on most steel door frames with no surface mounting box required.

▪ Push on wire connectors included.

3914/3914W Sounder

▪ Continuous output up to 102 db, field-selectable.

▪ Suitable for delayed egress installation.

▪ Exterior model (3914W) includes weatherproof gasket.

▪ Available in molded white for interior applications or molded red for exterior use.

Finishes

39032/39033 Models Only

▪ Aluminum: 628 (Clear Anodized)

▪ Bronze: 710 (Dark Anodized)

Switch Specifications

▪ **043**—1 MA DPDT, 6 A @ 125 VAC

▪ **09SMO**—1 MA SPDT, 10 A @ 250 V

▪ **09SMA**—1 MA SPDT, 10 A @ 250 V

39032   39033

3914/3914W

Side Profile

5-9/16 (141.3)   5-9/16 (141.3)   1-3/16 (30.2)

1-5/16 (33.3)   3-3/8 (85.7)   1/4 (6.4)

3914   3914W   39032/ 39033

HOW TO ORDER SOUNDERS
—

Type

032	— Audible Alert, Narrow[1]
033	— Audible Alert[1]
14	— Sounder, White
14W	— Sounder, Red w/ Weatherproof Gasket

Series
Alerts/Sounders/ Specialty Switches

39

39 **628**

1. Faceplate finish applicable to 39032 and 39033 only.

Clear Anodized Aluminum — **628**
Satin Dark Bronze Anodized — **710**

Finish[1]

Specifications	39032	39033	3914
Power Consumption	30 mA	30 mA	63 mA
Sound Output Level	80–96 db	80–96 db	102 db, field-selectable
Voltage	10 to 26 VDC	10 to 26 VDC	12/24 VDC

AC217 INTERIOR DIGITAL KEYPAD

—

The AC217 keypad for interior applications accepts up to 120 user codes, with over one million possible combinations.

The easy to operate AC217 programmable digital keypad consists of a 12 digit keyboard and a microprocessor with non- volatile memory. The microprocessor controls the advanced features of the keyboard and all programming options. Five separate outputs are controlled by 120 user codes and two additional inputs. Available in a variety of plated finishes. Commonly used in office buildings, computer rooms, parking gates, residential applications, garage doors and storage facilities.

Features
- Plug-in power supply standard.
- (1) main relay output.
- (4) voltage outputs, including keypad active output.
- 120 PIN codes from 1–6 digits.
- Codes stored in EEPROM memory and cannot be lost during power failure.
- Unaffected by electromagnetic interference.

- Momentary or latching outputs.
- Yellow LED key press indicator.
- Red/green/yellow status indicator.
- Disable keypad.
- Disable individual PIN codes.
- Anti-tamper keypad lockout.
- Request to exit input.
- Panic code.
- 2-3/4" W × 4-1/2" H × 1-1/8" D.
- 22 ga stainless steel or plated steel faceplate.

Electrical Specifications
- Input Voltage: 12/24 V AC/DC.
- Power Consumption: 20 mA at rest, 120 mA max.
- Outputs—Main relay #0: SPDT 6 A @30 VDC
- Aux voltage #1–#4: Switches to (–) @500 mA max.
- Plug-in Power Supply: 12 VDC, 780 mA fused and filtered lock output, 150 mA non-fused, regulated and filtered keypad output, AC ground, UL listed, Class 2.

Environmental Specifications
- Operating Temperature: –28° C to 55° C (–20° F to 130° F).
- Humidity: 90%.

Finishes

Standard Finish
Stainless: 630 (Satin)

Optional Plated Finishes
- Brass: 605 (Bright) or 606 (Satin)
- Bronze: 613 (Dark Oxidized Satin)
- Chrome: 625 (Bright)

Keypad Operation
The AC217 digital keypad is simple to operate. When a valid code is entered, the self-contained electronics will direct a signal to programmed output(s).

For access control applications, a request to exit can be added and programmed to activate any output(s).

For alarm control applications, enter a valid user code to arm or disarm. A different code can be used to shunt or bypass an alarm zone. If enabled, the # and * trigger a panic condition which can be programmed to any output(s).

Programmable Outputs
The main relay output #0 and voltage outputs #1–#3 can be programmed as momentary or latching (On/Off). When programmed as latching, a correctly entered code alternates output position. Momentary time operation is programmable for 1–255 seconds.

AC225 EXTERIOR/AC228 INTERIOR DIGITAL KEYPAD
—

The AC225 exterior keypad and AC228 interior keypad, for use with gates and door applications, accept up to 480 user codes.

Rugged Outdoor Design
The **AC225** is intended for demanding external, commercial environments. The keypad is housed in a rugged, cast aluminum enclosure that can be mounted on a wall or pedestal. A key lock secures the housing. The die-cast buttons feature bright, durable, and easy to read yellow graphics. Pressing any key activates a courtesy light, illuminating the keys for two minutes.

Versatile Interior Keypad
The **AC228** is designed to control access of a single entry point for facilities with up to 480 users. Each user is assigned a Personal Identification Number (PIN). Key pad entry of a valid 1–6 digit code activates one or both of the output relays, releasing an electric door lock.

The **AC225 Exterior** and **AC228 Interior** keypads are wired and programmed identically, thus simplifying the programming and control process by the end user.

Features
- Keypad programmable.
- 480 user codes.
- 1– 6 digit user codes.
- 4 independent outputs.
- 4 independent timers.
- 2 Form C relay contacts.
- 2 solid state open collector outputs.
- Program entry codes to activate one or two relays.
- Disable input.
- Door sense input.

- Request-to-exit/enter input.
- Keypad tamper lockout.
- Timed anti-passback.
- Two LED status indicators.
- Tactile key feel.
- Audible code entry verification.
- 4" W × 5-1/2" H × 3" D (AC225).
- 3-1/8" W × 5-1/8" H × 1-1/2" D (AC228).

Electrical Specifications
- Voltage: 12/24 V DC or AC (AC supply must be transformer isolated).
- Current: 10 mA typical, 150 mA max.
- Outputs: Relay #1, SPDT, 5 A @ 24 V; Relay #2, SPDT, 1 A @ 24 V; Output #3 and #4, solid state open collectors, short to common, 100 mA @ 30 VDC.

Environmental Specifications
- Operating Temperature: –30° C to 65° C (–22° F to 149° F).
- Humidity: 5%–95%, non-condensing.

The user selects the output(s) to be associated with every code or REX input. Separate user codes and REX input can have their own specific output(s). Respective codes can be used to complete tasks and can function independently of each other.

The main relay output #0 can control practically any kind of device, including magnetic locks, electric strikes, industrial equipment, and security systems. Outputs #0–#3 can be used to indicate duress or panic or can drive an external auxiliary relay or LED. Use key active output #4 to activate a relay for a lamp or camera.

AC225   AC228

Code Types
- **Panic**—Triggered when the # and * are pressed simultaneously. This special code can be programmed to available output #0–#3.
- **Operating Codes**—Any one of 120 operating codes can be programmed to activate any or all four available outputs.
- **Programming Code**—User selectable six digit code. Must be entered before programming can be accomplished. Prevents tampering with codes by unauthorized personnel.
- **Request-to-Exit**—A simple "request to exit" button can be used to allow a timed exit from a protected area without using a code.

Programming Options
- Add a user code.
- Delete a user code.
- Change the programming code.
- Program "panic" to output(s).
- Program "request-to-exit" to output(s).
- Enable/disable key press, yellow LED indicator.
- Set code length from 1 to 6 digits.

- Set main relay time.
- Set voltage output time.
- Erase everything.

Finishes
- AC225 Enclosure— Black: 711 (Flat)
- AC225 Face Plate— Stainless Steel: 630 (Satin)
- AC228 Face Plate— Matte Silver over PVC

Keypad Operation
Pressing any key activates a courtesy light, illuminating the keys for two minutes (AC225 only). Verification of key press is provided by audible and tactile feedback. If the user presses the wrong key, the * key can be used to reset and start over. When a valid PIN is entered, the LED indicator turns from red to green and the programmed relay activates for the programmed time length. Too many incorrect PIN entries will lock out the keypad. Keypad lockout is indicated by a yellow LED. An anti-passback feature prevents use of the same code twice before a programmed time length period elapses. The EEPROM memory retains all entry codes and programming during a power failure.
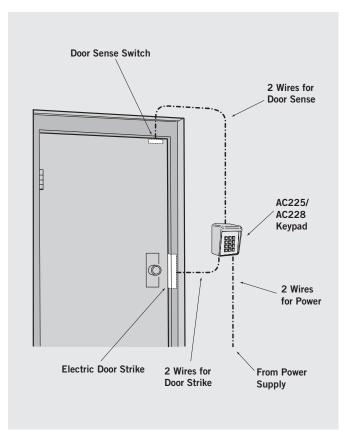
Programmable Outputs

The keypad features four independent outputs with four independent timers. Outputs #1 and #2 are Form "C" relay contacts. Outputs #3 and #4 are solid-state open collector outputs, short to common, which are used to signal forced entry, door ajar, lockout, shunt alarms, request to exit, and keypad active conditions.
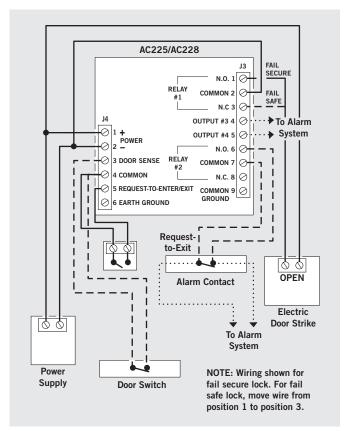
Operating Features

- System reset.
- Entry code.
- Adding a new PIN.
- Erasing a single PIN.
- Erasing all PINs.
- Changing the master programming code.
- On-time for each of the four outputs.
- Beep sounds on key presses.
- Beep sound during each of the four output activation times.

- Keypad locked out after specified number of incorrect PIN attempts, from 2–7.
- Anti-passback time period from 1–4 minutes or no anti-passback.
- Alarm shunt output.
- Forced entry output.
- Door ajar output.
- Door sense/inhibit input.
- Keypad active output.

Door Application

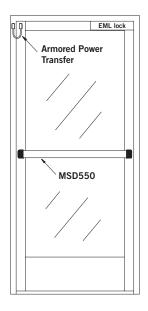
Typical Door Installation Wiring

Available Items

AC200 Keypads

Item	Description
AC217 630 (Standard)	Keypad, Indoor 120 user code, satin stainless face plate
AC217 605	Keypad, Indoor 120 user code, bright brass face plate
AC225 630	Keypad, Outdoor, 480 user code, satin stainless face plate
AC228 626	Keypad, Indoor, 480 user code, satin chrome face plate

MSD550 MECHANICAL SWITCH BAR

—

The DORMA MSD550 mechanical switch bar is designed to release magnetic locking devices or for use as a monitor device to activate or shunt an alarm.

The MSD550 will trigger when the bar is depressed less than 1/8". It is constructed using an exclusive heavy-duty aluminum extrusion and rugged molded end caps. The mounting assembly is all metal. The rigid construction prevents malfunction due to sagging doors, warped doors, or tweaked-glass door stiles. The MSD550 is designed for high frequency usage on all types of doors. The standard size above fits door openings 27" to 36" wide. For 42" or 48" wide doors, add suffix 42 or 48 to the model number.
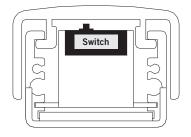
Finishes

Standard Anodized Finishes
- Aluminum: 628 (Satin)
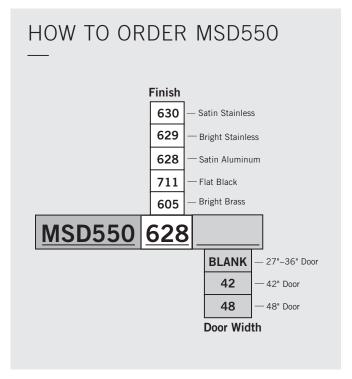- Black: 711 (Flat)

Optional Plated Finishes
- Brass: 605 (Bright)
- Stainless: 629 (Bright) or 630 (Satin)

NOTE: Special order finishes, no cancellations or returns.

Item	Description
MSD550	Mechanical Switch Bar (Non-Latching) Door Opening 36" PDT 5 Amp @ 125 VAC

HOW TO ORDER MSD550

—

Finish

630	— Satin Stainless
629	— Bright Stainless
628	— Satin Aluminum
711	— Flat Black
605	— Bright Brass

MSD550	628	

BLANK	— 27"–36" Door
42	— 42" Door
48	— 48" Door

Door Width

POWER TRANSFER DEVICES
—

75200—Electrified intermediate pivot for power transfer. This eight-wire design uses #28 AWG, rated for 24 V maximum. Pairs of wires connected together provide 2 amps maximum. Multiple pairs provide greater amperage ratings, i.e. two pairs in a circuit provide 4 A maximum, and four pairs provide 8 A maximum. Pivot is non-load bearing and has non-separable pivot leaves. Specify Hand.

ES105—Power transfer with steel housing and flexible tube. Secure and inconspicuous channel to bring power from frame to door. Narrow, shallow channel easily mortises into door edge. Accepts up to 5/16" dia. wire bundle. Accommodates doors that swing open 120º. Concealed when door is closed. Suitable for wood, aluminum, or steel applications.

E80622, 2 wire/E80624, 4 wire—Electrified walking beam top pivot for power transfer. Available in a two-wire and four-wire design using #18 AWG. Both designs provide a maximum of 6 A @ 24 V. Specify number of wires required

3118—Satin Aluminum armored flex conduit less wires with end caps. Eighteen inches long.
- 4 Conductor @ 22 GA
- 2 Conductor @ 18 GA

3218—Stainless steel armored flex conduit less wires with junction box. 18" long.
- 16 Conductor @ 22 GA
- 8 Conductor @ 18 GA

4-1/2" × 4-1/2" five-knuckle standard weight hinges with concealed wires, tested 800,000 cycles, UL10B listed 3-hour fire-rated doors.

PTH4—Power transfer hinge; Four (4) wire (2 pairs) rated 1 A @ 12/24 VDC.

PTH4DPS—Power transfer hinge; Four (4) wire (2 pairs) rated 1 A @ 12/24 VDC; Plus door status SPDT rated 250 mA @ 30 VDC.

PTH6—Power transfer hinge; 1 pair rated 16 A inrush, 4 A continuous; 2 pair 1 A @ 12/24 VDC.

PTH6DPS—Power transfer hinge; 1 pair rated 16 A inrush, 4 A continuous; 2 pair 1 A @ 12/24 VDC; Plus door status SPDT rated 250 mA @ 30 VDC.

PTH10—Power transfer hinge; Ten (10) wire (up to 5 pairs) rated 1 A @ 12/24 VDC.

PTH10DPS—Power transfer hinge; Ten (10) wire (up to 5 pairs) rated 1 A @ 12/24 VDC; Plus door status SPDT rated 250 mA @ 30 VDC.

Available Items

Item	Description
Power Transfer	
ES105	Power transfer conduit—satin chrome finish
Flex Loops	
3118 628	Loop, 18", surface mount flex, satin aluminum finish
3118 695	Loop, 18" flex, surface mount, less wires, dark bronze painted
3118 714	Loop, 18" flex, surface mount, less wires, white painted
3218 630	Loop, 18" flex, heavy duty, less wires, satin stainless
Wired Hinges	
PTH4 626 / PTH4 DPS 626	Hinge, 4 wire power transfer, 4-1/2" × 4-1/2", satin chrome finish
PTH4 613 / PTH4 DPS 613	Hinge, 4 wire power transfer, 4-1/2" × 4-1/2", dark bronze finish
PTH4 605 / PTH4 DPS 605	Hinge, 4 wire power transfer, 4-1/2" × 4-1/2", bright brass finish
PTH6 626 / PTH6 DPS 626	Hinge, 6 wire power transfer, 4-1/2" × 4-1/2", satin chrome finish
PTH6 613 / PTH6 DPS 613	Hinge, 6 wire power transfer, 4-1/2" × 4-1/2", dark bronze finish
PTH6 605 / PTH6 DPS 605	Hinge, 6 wire power transfer, 4-1/2" × 4-1/2", bright brass finish
PTH10 626 / PTH10 DPS 626	Hinge, 10 wire power transfer, 4-1/2" × 4-1/2", satin chrome finish
PTH10 613 / PTH10 DPS 613	Hinge, 10 wire power transfer, 4-1/2" × 4-1/2", dark bronze finish
PTH10 605 / PTH10 DPS 605	Hinge, 10 wire power transfer, 4-1/2" × 4-1/2", bright brass finish
Wired Pivots	
75200 626 (standard)	Pivot, 3/4" offset intermediate, electrified, 8 wire, satin chrome finish
75200 605	Pivot, 3/4" offset intermediate, electrified, 8 wire, bright brass finish
75200 606	Pivot, 3/4" offset intermediate, electrified, 8 wire, satin brass finish
75200 611	Pivot, 3/4" offset intermediate, electrified, 8 wire, bright bronze finish
75200 612	Pivot, 3/4" offset intermediate, electrified, 8 wire, satin bronze finish
75200 613	Pivot, 3/4" offset intermediate, electrified, 8 wire, dark bronze finish
75200 619	Pivot, 3/4" offset intermediate, electrified, 8 wire, satin nickel finish
75200 625	Pivot, 3/4" offset intermediate, electrified, 8 wire, bright chrome finish
E80622 630 / E80624 630 (Standard)	Pivot, center hung top, electrified, 8 wire, satin chrome finish
E80622 605 / E80624 605	Pivot, center hung top, electrified, 8 wire, bright brass finish
E80622 606 / E80624 606	Pivot, center hung top, electrified, 8 wire, satin brass finish
E80622 611 / E80624 611	Pivot, center hung top, electrified, 8 wire, bright bronze finish
E80622 612 / E80624 612	Pivot, center hung top, electrified, 8 wire, satin bronze finish
E80622 613 / E80624 613	Pivot, center hung top, electrified, 8 wire, dark bronze finish
E80622 619 / E80624 619	Pivot, center hung top, electrified, 8 wire, satin nickel finish
E80622 629 / E80624 629	Pivot, center hung top, electrified, 8 wire, bright stainless finish
E80622 689 / E80624 689	Pivot, center hung top, electrified, 8 wire, aluminum painted finish
E80622 695 / E80624 695	Pivot, center hung top, electrified, 8 wire, dark bronze painted finish

TIMERS/RELAYS
—

TDM—Advanced time delay module, allowing the installer to use only one time delay for any automatic door operation, electrically or magnetically locked doors, or vestibule sequencing applications.

Takes one to four inputs and converts them to sequential relay outputs.

As a make/break relay, eliminates mechanical binding of the locking mechanism on an automatic door. Make relay can be configured as a wet output to directly apply power to an electric locking device.

To sequence vestibule sets of doors, unit provides an initial relay output for the first door, a delay between outputs 1 and 2, and another output for the second door. Also provides a delay between outputs 2 and 1, allowing you to sequence your vestibule in both directions with only one TDM. Each delay adjustable from 0.0 to 99 seconds.

- Power: 12 to 24 V AC/DC Power.
- Consumption: 2 W max.
- Output Contact: Form C, rated @ 3 A.
- Relay Contact Ratings: 3 A:120 V AC; 3 A:30 V DC.
- Temperature: –30° C to 70° C (–22° F to 158° F).

14-2—7-day programmable timer with built-in battery for memory storage up to 100 yr.

Specify 12 V AC/DC or 24 V AC/DC. One (1) SPDT dry contact, 16 A @ 30 V AC/DC.

TD-ADJ—Adjustable timer accessory with 0–30 second delay. Includes functionality to change delay from seconds to minutes enabling delay of over 24 hours.

TD-FIX—Fixed 30 second timer accessory.

24-12CONV—Converts 24 VDC current input to 12 VDC output 1.5 A output @ 12 VDC.

12-24CONV—Converts 12 VDC current input to 24 VDC output 1.5 A output @ 24 VDC.

C400 DESKTOP CONSOLES

—

An economical method of controlling 1–2 doors.

DORMA desktop consoles are available in two switch configurations with tricolor LED indicators. When used with a door position or a lock status sensor, the LEDs allow monitoring of door and lock modes. The switches can provide an on/off function or momentary access control for electromagnetic locks, shear locks, bolt locks, delayed egress systems, electrical exit systems, or electric strikes.

- The CC-401DTM has (1) LED and (1) momentary switch to release and monitor one door opening.
- The CC-402DTM has (2) LEDs and (2) momentary switches to release two door openings.
- The CC-403DTM has (2) LEDs with (1) momentary switch and (1) maintained switch.

The momentary switch can be used to release a single door. The maintained (On/Off) switch can be used as a bypass for keeping the door unlocked for an extended period of time. The tricolor LEDs can display green, red, and amber colors to indicate up to three lock status conditions.

Features

- Choice of heavy duty momentary or maintained operating switches accommodate lock control functions.
- Tricolor LED indicators provide for immediate status indication of door position or lock status when used with lock monitors such as door position (DPS) or bond sensors (BA).
- Push-button switches provide an aesthetically pleasing appearance and high operational reliability.

Specifications

- Dimensions: 4-1/8" W × 3-1/8" H × 6-1/4" L. Contact Rating: 5 A @ 30 VDC max.
- Input Power: 12/24 VDC @ 20 mA required for each LED.
- Console Color: Beige.

Switch Wiring

- Common: White.
- Normally Open (NO): Yellow.
- Normally Closed (NC): Orange.
- Indicator: Bicolor LED 12 to 24
- V. Negative: Black.
- Red Illumination Positive: Red
- Green Illumination Positive: Green.
- Amber Illumination Positive: Power red and green simultaneously.

Available Items

Item	Description
CC401DTM	1 Momentary (MO) switch, 1 LED
CC402DTM	2 Momentary (MO) switches, 2 LEDs
CC403DTM	1 Momentary (MO) switch, 1 maintained (MA) switch, 2 LEDs
CC402DTMA	2 Maintained (MA) switches, 2 LEDs

DESK SWITCHES
—

PD15-1—MA SPDT 6 A @ 30 V AC/DC
PD15-2—MO SPDT 10 A @ 30 V AC/DC
PD15-3—MO SPDT push-button, with on/off toggle switch 6 A @ 30 V AC/DC

Mounted on the underside of a desk for remote door control. May be connected to REX input of an access control or trigger input of a time delay relay to allow timed access and egress.

Adjustable ball type door position switches. Compatible with swinging or sliding doors.

DPS-11—SPDT 5 A @ 30 V AC/DC, #20 AWG
DPS-11-2—(2) SPDT 5 Amp @ 30 V AC/DC, #20 AWG

Finish
Aluminum: 628 (Satin)

39043 Emergency Pull Station—Enables emergency release for electromagnetic locks. Clear polycarbonate cover lifts easily so paddle can be pulled forward, instantly releasing lock. Available in molded yellow or blue with red pull.

043—1 MA DPDT, 6 A @ 125 VAC

3909 Rocker Switch—Suitable for desk mount applications. Surface mount under desk or counter for concealment. Available in molded beige.

09SMO—1 MA SPDT, 10 A @ 250 V
09SMA—1 MA SPDT, 10 A @ 250 V

MC-4—Self-locking recessed mount. 3/4" dia. magnetic contact. Accommodates up to a 1/2" gap between the door and frame.

SPDT 250 mA @ 30 V AC/DC, #22 AWG

MC-7—Self-locking recessed mount with 1" dia. magnetic contact. Accommodates up to a 1/2" gap between the door and frame.

SPDT 250 mA @ 30 V AC/DC, #22 AWG

MC-4M—Recessed magnet mounted on 1-1/4" × 4-7/8" plate. Accommodates up to a 1/2" gap between the door and frame.

SPDT 250 mA @ 30 V AC/DC, #22 AWG
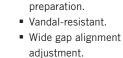
Finish
Aluminum: 628 (Satin)

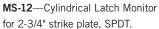# MONITOR STRIKES
——

Technical Details
- Strong trigger mechanism, (not vandal prone sheet metal).
- Fits standard ANSI 2-3/4" or 4-7/8" strike (provided by others).
- Cylindrical, non-handed/ mortise, reversible handing.

- Standard ANSI frame preparation.
- Vandal-resistant.
- Wide gap alignment adjustment.
- Horizontal alignment adjustment.
- SPDT contact, 5 A @ 30 VDC (2nd contact optional).

MS-16—Mortise Lock Latch Monitor, SPDT.

MS-16D—Mortise Lock Latch Monitor, DPDT.

MS-12—Cylindrical Latch Monitor for 2-3/4" strike plate, SPDT.

MS-12D—Cylindrical Latch Monitor for 2-3/4" strike plate, DPDT.

MS-18—Mortise Lock Dead Bolt Monitor, SPDT.

MS-18D—Mortise Lock Dead Bolt Monitor, DPDT.

MS-14—Cylindrical Latch Monitor for 4-7/8" strike plate, SPDT.

MS-14D—Cylindrical Latch Monitor for 4-7/8" strike plate, DPDT.

MS-20—Mortise Lock Latch and Dead Bolt Monitor, SPDT.

MS-20D—Mortise Lock Latch and Dead Bolt Monitor, DPDT.

DORMA