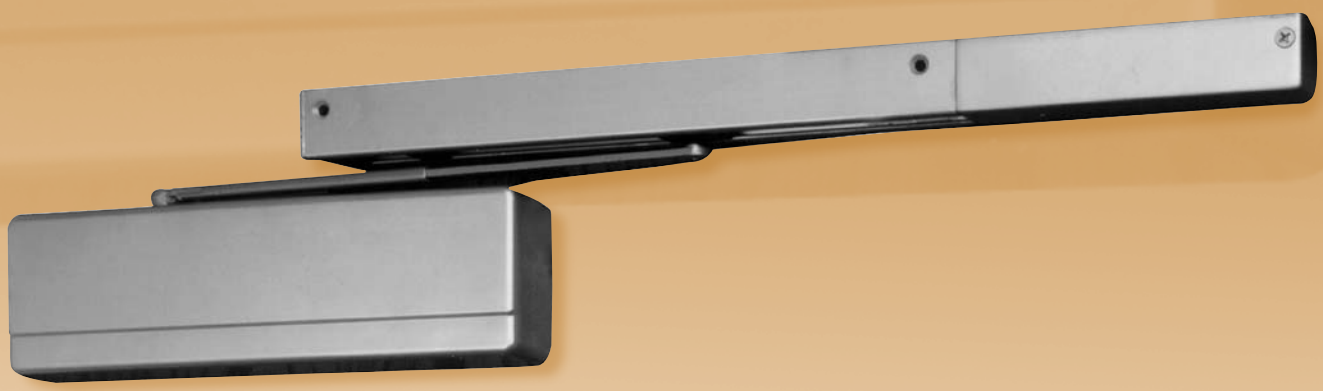
SARGENT®

2408/2900
Fire Guard®



An ASSA ABLOY Group company

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FIRE GUARD®

SARGENT
1-800-727-5477
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How to Order

Specify	Note	Example
Quantity	Number Ordered	**1 Qty.**
Prefix	Additional Feature	1 Qty. **12-**
Series/Function	See Applications	1 Qty. 12-**2991**
Voltage	Not required for 9- Companion	1 Qty. 12-2991 **24**
Hand	Required	1 Qty. 12-2991 24 **RH**
Finish	See Finishes	1 Qty. 12-2991 24 RH **EN**
Additional Information	Item/Heading Number, Door Number	1 Qty. 12-2991-24 RH EN X **Door 205**

Finishes

US Finish	Descriptions	ANSI/BHMA
EB	Sprayed bronze enamel to match 10B	690
ED	Sprayed black enamel to match 20D	693
EN	Sprayed aluminum enamel	689
EP	Sprayed bronze enamel to match 10	691
EAB	Sprayed brass enamel	696

On The Cover

2468 Pull Side

Application Description & Prefix Designation

Applications:

Single Point Hold Open

2468 – Pull side, non-handed
2478 – Pull side Double Egress, handed
2498 – Push side, non-handed

Multi-Point Hold Open

2960 – Pull side, handed
2970 – Pull side Double Egress, handed
2980 – Pull side Swing Free, handed
2991 – Push side, O arm, handed
2992 – Push side, OZ arm, handed
2993 – Push side, OZA arm, handed
2994 – Push side, OY arm, handed
2995 – Push side, OYA arm, handed

Prefixes

9- Companion unit for use with 12- smoke

- All companion units (9-) and stand alone units are UL Listed for application with all compatible UL Listed fire and smoke detection equipment.

12- Smoke detector unit

- All smoke detector units (12-) have been tested and evaluated for public safety by Underwriters Laboratories and are listed for application on labeled fire doors.

80- Prefix

- Adjustable hold open bypass switch allows hold open from 20° through full door opening. Not available for 9- or 2980 units

No Prefix

- Stand Alone unit for use with fire alarm system

FIRE GUARD®
2408 & 2900 Features

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The SARGENT FIRE GUARD® (2408 & 2900) Series of Electromechanical Closer-Holder Release Devices are designed to hold open fire and smoke rated doors until power is interrupted by a fire alarm condition or remote release switch. Designed for durability, ease of installation and aesthetics, each series provides the means to achieve fire and building code compliance without interfering with normal building operation.

Each series includes an ANSI/BHMA A156.4 Grade 1 hydraulic door closer, for proper operation during the opening and closing cycles. They are also applicable for use on non-rated doors such as offices and conference rooms where the convenience of an electrically controlled release device is desirable.

The Fire Guard Series is also available with an integrated photoelectric smoke detector for use in existing facilities lacking a fire/smoke detection system or where a redundant system is required for added life and safety protection.

2408/2900 Common Features

- Conforms to standards UL10C and UBC 7-2 (1997), Positive Pressure Fire Tests of door assemblies
- UL Listed and cUL Listed to Canadian Safety Standards for use on fire doors
- Available in 5 finishes
- **Holder**
  - Fail safe operation
  - Push or pull or double egress installations
  - Will accommodate concealed or surface wiring standard
  - Operating voltages: 24VAC/24VDC, or 120VAC @ .1 Amp.
  - Photoelectric smoke detector with LED indicator option
  - Terminal strip for ease of wiring
  - Maintained On/Off switch
  - Self resetting fuse on circuit board
  - Remote release option
  - 2 year limited warranty on electromechanical components
- **Closer**
  - ANSI/ BHMA A156.4 Grade 1 Closer
  - Rack and pinion operation
  - Body is cast, one piece high strength aluminum/silicon alloy
  - Full size 1/8" (3mm) brass adjusting valves
  - Adjustable spring power
  - Adjustable closing and latching speeds
  - Adjustable backcheck (Auxiliary door stop required)
  - 10 year limited warranty on 351 closer body

Additional Fire Opening Release Devices

In addition to the 2408 and 2900 Fire Guard Series, SARGENT offers other alternatives for door holding/releasing devices that may be more appropriate to your application. All are UL Listed for fire door assemblies and readily interconnect with building fire protection systems.

351 EHT Closer-Holder Devices

Designed to hold open fire or smoke doors until released by the fire detection system, the 351 EHT provides a convenient means of meeting fire and building code requirements without interfering with normal building operation. The 351 EHT Closer-Holder combination allows the door to be normally held open, but is self-closing when power is interrupted during an emergency or by switch control. With its rugged track design, the 351 EHT is suitable for multiple manual operations. See 351 EHT Closer-Holder Release catalog for complete application information.

1560 Series Electromagnetic Door Holders

The 1560 Series of Electromagnetic Door Holders are Fail Safe devices designed to hold open self closing smoke and fire doors until released by a fire protection or other control system. Holders are available in surface and flush mount designs and are well suited for applications where there is insufficient space for Fire Guards or the 351 EHT Closer-Holder. See Holder and Stops Catalog for complete information.

1561 Flush Mount

1560 Surface Mount

Overhead Stops

A complete line of Overhead Stops is available to complement the Fire Guard, 351 EHT and 1560 Holders. They limit door opening and prevent damage to the closer-holder, trim or surrounding walls. Full information may be found in the Holder and Stops catalog.

FIRE GUARD®
2408 Series Single-Point Hold Open Applications and Mounting Details

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Features of 2408 Series

- Easily retrofits existing 2407 Series Fireguard
- Single point hold open
- Hold open position adjustable from 85° to 110°
- Easy adjustment
- Adjustable holding power
  - Acts like standard door closer until opened to the hold open point
  - Maintains open position until released
- Powder coated aluminum track
- Auxiliary stop required
- Long wearing roller/slide assembly
- Cover projection only 2-3/16" (81mm)
- High impact, corrosion resistant cover secured by machine screws
- Remote release option
- Accessible maintained on/off switch
- Holder: Aluminum track will accommodate concealed or surface wiring
- Closer: Cover projection 2-3/16" (56mm) max.

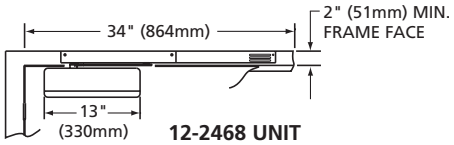
Applications

- 351-A Mounting Plate may be used for door with narrow top rail (pull application)
- 351-D Drop Bracket may be used for door with narrow top rail (push application)
- Suitable reinforcements required for metal door and frames
- Minimum frame face required 2" (51mm)

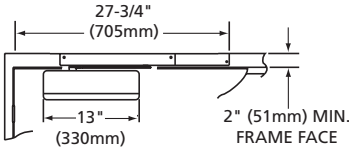
2468, 9-2468, 12-2468 Pull Side

12-2468 Shown

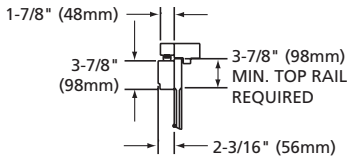
- Track is mounted to face of frame
- The 351 closer is mounted to hinge side of door
- Use on corridor or stairwell doors when pull side, single-point hold open is required
- Non-handed



12-2468 UNIT



9-2468, 2468 UNITS



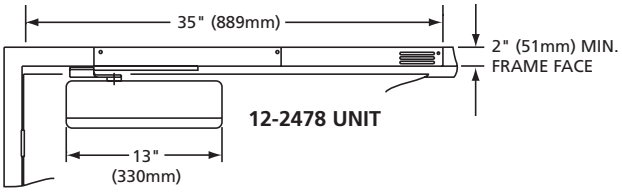
Minimum Door Size	Catalog Number
34" (864mm)	12-2468
28" (711mm)	9-2468*, 2468

*Used in conjunction with 12-unit only.

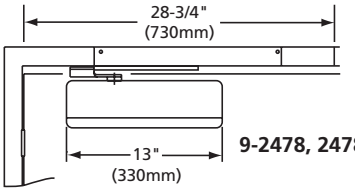
2478, 9-2478, 12-2478 Pull Side - Double Egress

12-2478 Shown

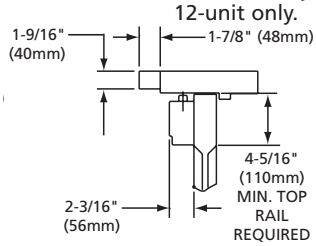
- Track is mounted to face of frame
- The 351 closer is mounted to hinge side of door
- Use on double egress openings when pull side hold open is required
- Double egress arm for reveal of 1/8" (3mm) to 3" (76mm) maximum
- Handed



12-2478 UNIT



9-2478, 2478 UNITS



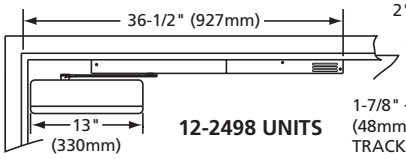
Minimum Door Size	Catalog Number
34" (864mm)	12-2478
28" (711mm)	9-2478*, 2478

*Used in conjunction with 12-unit only.

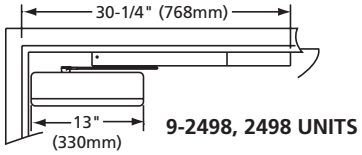
2498, 9-2498, 12-2498 Push Side

2498 Shown

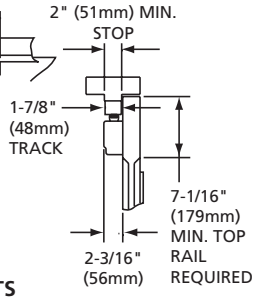
- Track is mounted to underside of the frame stop
- The 351 closer is mounted to stop side of door
- Use on corridor or stairwell doors where push side, single-point hold open is required
- Non-handed



12-2498 UNITS



9-2498, 2498 UNITS



Minimum Door Size	Catalog Number
38" (966mm)	12-2498
31" (787mm)	9-2498*, 2498

*Used in conjunction with 12-unit only.

FIRE GUARD®
2408 Series Single-Point Hold Open Assemblies, Arms & Components

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Assemblies

12-2408 Series Smoke Detector Unit

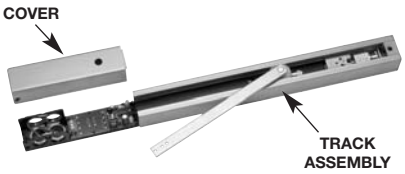
- Includes a photoelectric smoke detector and electromagnetic hold open mechanism
- Can be used to control a single door or a pair of doors in combination with a 9-2408 companion unit.
- Accessory wire pack 63-3212 needed for multiple 12- smoke detector interconnections or connection with 2/4 wire fire alarm systems

9-2408 Series Companion Unit

- Only used in conjunction with 12- models above
- Typically used on pairs of doors when only one smoke detector is required
- Includes electromagnetic hold open mechanism, which receives power from 12- model
- Available for input voltage of 24VDC regulated only

2408 Series Stand Alone Unit

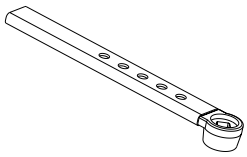
- Can be installed on a single door or a pair of doors when controlled by compatible UL Listed Fire Detection equipment or non-rated doors with remote release
- Includes electromagnetic hold open mechanism



Arms & Components

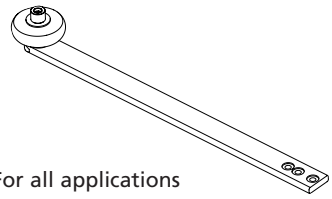
- Regular and double egress telescoping arms
- All applications use track principle
- Powder coated

63-2874 Link Insert & Extension



- For push and pull applications

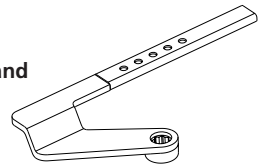
63-4219 Arm & Roller Assembly



- For all applications

63-3057 Double Egress Arm and Extension Assembly

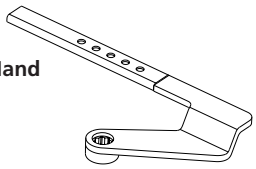
Left Hand



- For double egress doors with reveal greater than 1/8" (3mm) and less than 3" (76mm)

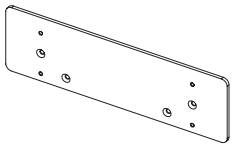
63-3056 Double Egress Arm and Extension Assembly

Right Hand



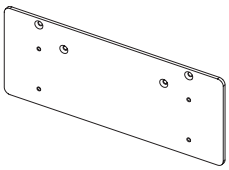
- For double egress doors with reveal greater than 1/8" (3mm) and less than 3" (76mm)

351-A Mounting Plate



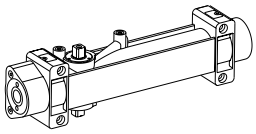
- For narrow top rail pull application

351-D Drop Bracket



- For narrow top rail push application

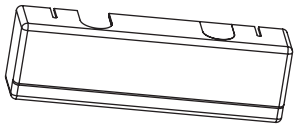
13-351 Closer Body



- Standard closer

351-C Plastic Cover

Non-handed



Notes:

Screw Pack for all models, 63-3431

Specify finish when ordering arms or components.

Finishes: EB, ED, EN, EP and EAB.

FIRE GUARD®
2900 Series Multi-Point Hold Open Applications

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Features of 2900 Series

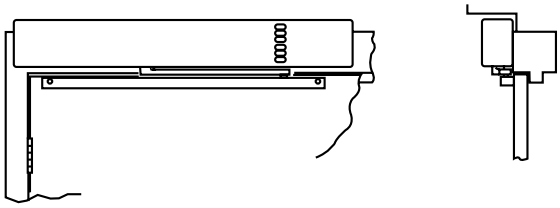
- Multi position hydraulic hold open
- Delayed, adjustable hold open 80-prefix
- Hold open positions from 10° to 170° (trim permitting)
- Reveals up to 8-5/8" (219mm) push side
- Swing free application available (pull side)
- Holder Operation
  - Multi-point hold open from 70° to 170°, trim permitting
  - Steel mounting plate accommodates surface or concealed wiring
  - Photoelectric smoke detector with LED indicator option
- Handed
- Auxiliary stop required
- Projection 2-9/16" (65mm) from frame face
- Metal cover secured by machine screws
- Steel mounting plate
- Remote release option
- Maintained on/off switch
- Maximum door opening 180°

Arms

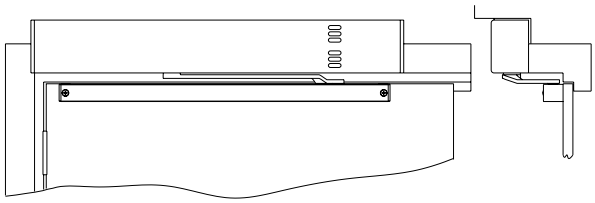
- Regular type for push side
- Track type for pull side and swing free
- Double Egress, Track type for Pull side

2960, 9-2960, 12-2960 Pull Side

- Closer/Holder is mounted to face of frame
- Track is mounted on surface of door, hinge side
- Use on corridor, stairwell doors and labeled doors which require over 110° opening

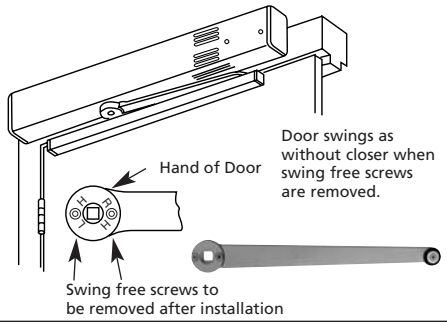


2970, 9-2970, 12-2970 Pull Side-Double Egress



- Closer/Holder is mounted to face of frame
- Track is mounted on hinge side of door
- Double egress arm for reveal of 1/8" (3mm) to 3" (76mm) maximum
- Use on corridor or stairwell doors when pull side, multi-point hold open is required

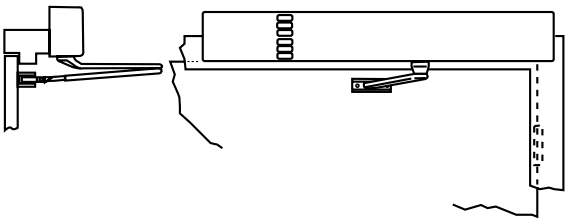
2980, 9-2980, 12-2980 Pull Side - Swing Free



- Closer/Holder is mounted to face of frame
- Track is mounted on surface of door, hinge side
- Door acts as if no closer is installed or swings free until the alarm is activated
- Use on patient room doors in hospitals, nursing homes or anywhere a bedroom-like atmosphere is required
- Allows door to be opened, closed or partially open
- When released during an emergency, door closes from any position

2990, 9-2990, 12-2990 Push Side

- Closer/Holder is mounted to face of frame
- Track is mounted on surface of door, stop side
- Use on corridor, stairwell doors and labeled doors which require over 110° opening



FIRE GUARD®
2900 Series Multi-Point Hold Open Mounting Details

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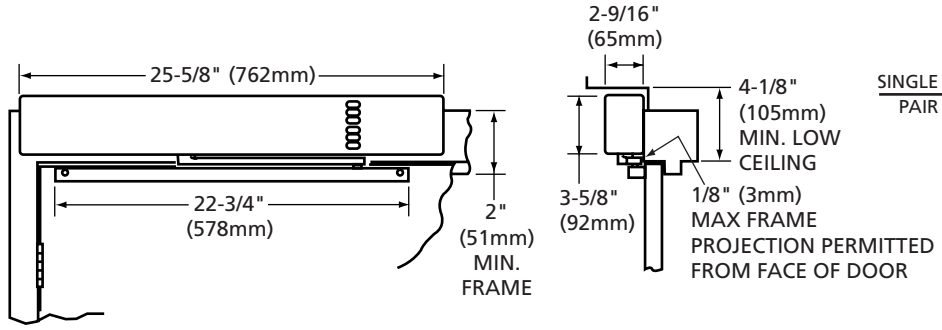
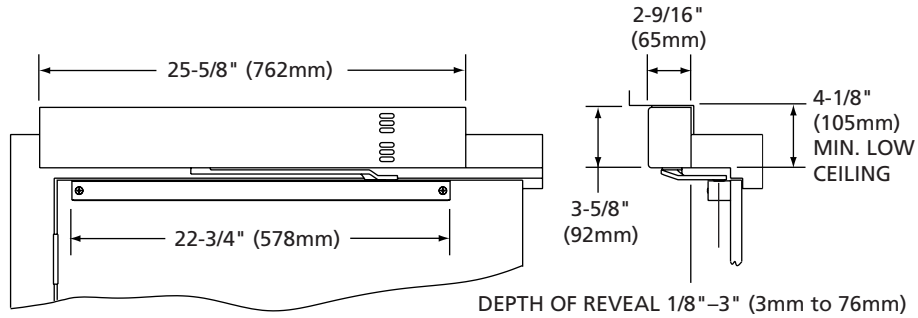
2960, 2980, 9-2960, 9-2980, 12-2960, 12-2980 Pull Side

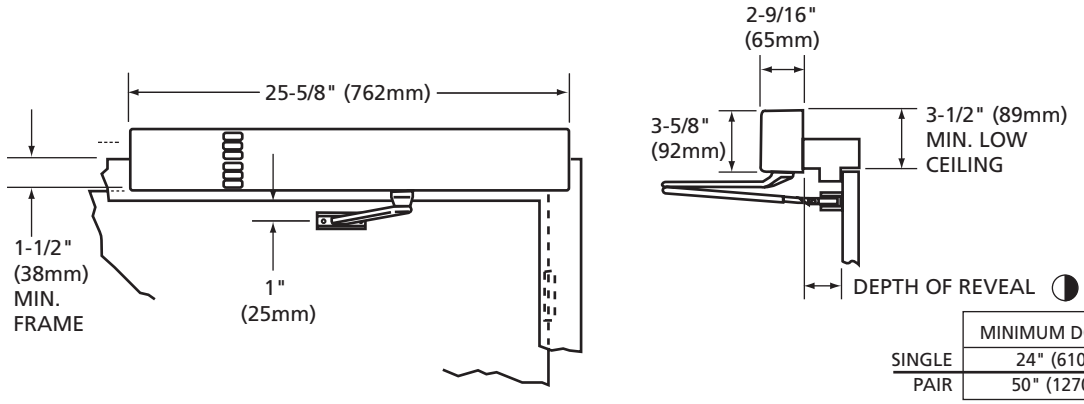


	MINIMUM DOOR SIZE	CATALOG NUMBER
SINGLE	24" (610mm)	12-2900, 2900
PAIR	50" (1270mm)	12-, 9-, 2900

2970, 9-2970, 12-2970 Pull Side–Double Egress



2990, 9-2990, 12-2990 Push Side



	MINIMUM DOOR SIZE	CATALOG NUMBER
SINGLE	24" (610mm)	12-2900, 2900
PAIR	50" (1270mm)	12-, 9-, 2900

ARM ASSEMBLY REQUIREMENTS FOR 2990, 9-2990 & 12-2990 UNITS

DEPTH OF REVEAL	CATALOG NUMBER	ARM ASSEMBLY REQUIRED	MAXIMUM DOOR OPENING	RANGE OF HOLD OPEN
0 to 1-3/4" (45mm)	2991	"O" Arm	180°	10° to 170°
1-7/8" (48mm) to 4" (102mm)	2992	"OZ" Arm	180°	10° to 170°
4-1/8" (105mm) to 7" (178mm)	2993	"OZA" Arm	160°	10° to 150°
4-1/8" (105mm) to 7" (178mm)	2994	Heavy duty "OY" Arm	180°	10° to 170°
7-1/8" (203mm) to 8 5/8" (219mm)	2995	Heavy duty "OYA" Arm	180°	10° to 170°

FIRE GUARD®
2900 Series Multi-Point Hold Open
80- Prefix Adjustable Hold Open Arms & Components

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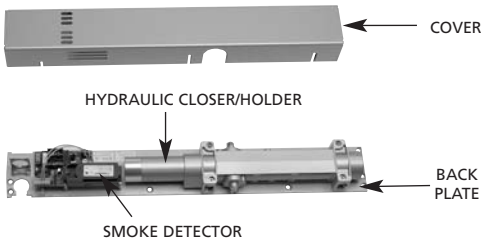
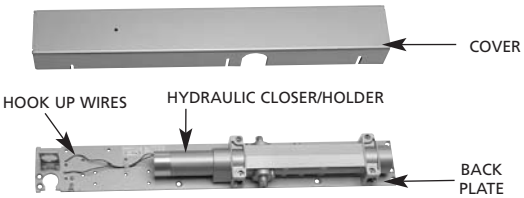
12-2900 Series Smoke Detector Unit

- 12-2900 Smoke Detector Unit includes a photoelectric smoke detector and a hydraulic hold open device housed in the body of the closer
- Can be used to control a single door or a pair of doors in combination with a 9-2900 companion unit
- Accessory wire pack 63-3212 needed for multiple 12- smoke detector interconnections or connection with 2/4 wire fire alarm systems



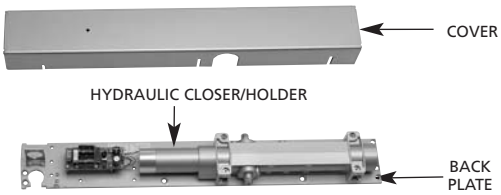
9-2900 Series Companion Unit

- Includes hydraulic hold open device
- Can be installed as a companion unit to the 12-2900 only
- Available for input voltage of 24VDC regulated only
- Not available with 80-Prefix, adjustable hold open by pass switch



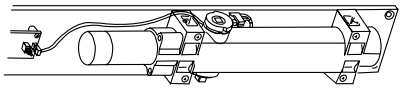
2900 Series Stand Alone Unit

- Includes hydraulic hold open device.
- Can be installed on a single door or a pair of doors when controlled by compatible UL listed Fire Detection equipment or 120VAC



80- Prefix Adjustable Hold Open By-Pass Switch

- Allows initial degree hold open position to be adjusted from 20° through full door opening
- Used on Pull side (2960 or 2970) or Push side (2990) units
- Not available with companion (9-) units or 2980 Series units



Switch is on opposite spindle from closer arm.

63-2216 O Foot Assembly

- For reveals up to 1-3/4" (44mm)

63-3314 OY Arm Assembly

- Heavy duty for reveals from 4-1/8" to 7" (105 to 178mm) 180° opening

63-2217 OZ Foot Assembly

- For reveals up to 1-7/8" (102mm) to 4" (102mm)

63-3315 OYA Arm Assembly

- Heavy duty for reveals from 7-1/8" to 8-5/8" (203 to 219mm) 180° opening

63-2218 OZA Foot Assembly

- For reveals from 4-1/8" to 7" (105-178mm)

63-2607 Main Arm and Link Assembly

- Used with O, OZ and OZA Foot Assemblies

63-3688 Slide Arm Assembly

- 2960 Series rigid arm

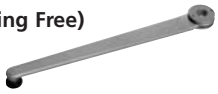
63-0156 Track Only

- Used with double Egress arm above
- Cover used with 12-2900 Series 63-3718 (Not Shown)

63-0682 End Cap, 2 required

63-3405 Bearing Assy

63-3689 Slide Arm Assembly (Swing Free)



- Allows door to open and close with no closer spring pressure

63-3653 Double Egress Arm

- Left Hand Shown
- Right Hand 63-3654 Not Shown

63-3717 Cover

- Cover used with 9-2900 and 2900 shown
- Cover used with 12-2900 Series 63-3718, Not Shown

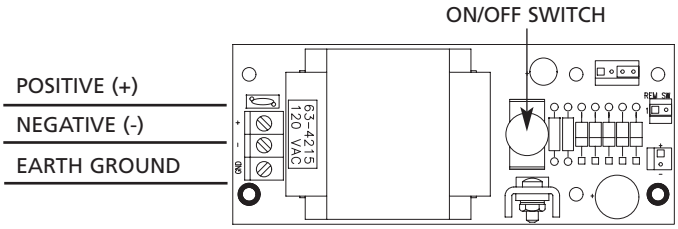
Notes:

Screw Pack for 2960 and 2980 models, 63-3700

Specify finish when ordering arms or components

Finishes: EB, ED, EN, FP and EAB

Power Input Connections



63-2868 Remote Connector Harness

- Harness for connection to circuit board of remote door release control
- **Required for remote release**

63-3212 Accessory Wire Pack

- Required for 12-units which are inter-connected to alarm panels (2 or 4 wire systems) or connecting multiple 12- units

63-3210 Smoke Detector

- Replacement photoelectric smoke detector

Switches and Printed Circuit Boards

When remote release is required, SARGENT offers both key and push button switches to interrupt power allowing the door to close. Consult Product System Manual for other switch options.

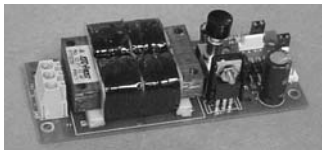
4370 Key Switch

- Allows remote or local release
- Switch rating: SPDT maintained contact 4 Amp. @ 24VDC
- Size 41 mortise cylinder (1-1/8" [29mm] length of shell)
- Finish: 32D

4241 Push Button

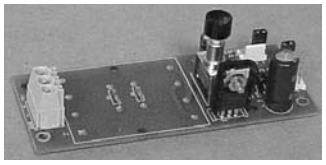
- Designed to mount under desk
- Red LED indicates status of lock
- Snap action push button
- Switch Rating: SPDT, 6 Amp. @ 24VDC
- 1-1/16" H x 3-1/8" W x 2" D (27mm x 79mm x 51mm)
- Finish: 28

63-4215 PC Board



- Replacement 120 Volts AC board assembly

63-4216 PC Board



- Replacement 24 Volt AC/DC board assembly

Power Supplies

24-volt DC regulated and filtered SARGENT power supplies to power your electromechanical products

3510

- 24VDC, 1.8 Amp.
- UL Listed for Class II applications
- Size: 10-1/8" (26cm) H x 8-1/2" (22cm) W x 4-1/8" (11cm) D

3530 Series

- 24VDC, 2 Amp.
- Contains SPDT relay which can be used for fire alarm tie in or auxiliary output relay
- UL Listed
- Size: 12" (30cm) H x 12" (30cm) W x 6" (15cm) D

3560

- 24VDC, 7.2 Amp.
- UL Listed
- Size: 16" (41cm) H x 12" (30cm) W x 6" (15cm) D

FIRE GUARD®
Suggested Architectural Specifications

SARGENT
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www.sargentlock.com

Architectural Specifications

2.0 SINGLE-POINT CLOSER HOLDER RELEASE DEVICES

A. Single-point door closer holder release devices shall be 2408 Series as manufactured by SARGENT Manufacturing Company, New Haven, CT.

B. Door closer holders shall meet ANSI/BHMA A156.15 requirements.

C. Provide door closer holders to hold doors open under normal use conditions and to release and close door upon receiving a signal from fire alarm, smoke detector, integral smoke detector, or manually by pushing or pulling the door.

D. Door closer holders shall be UL listed (US and Canada) for use on fire doors.

E. Door closer bodies:

1. One piece door closer body shall be die cast aluminum alloy with 14% silicon minimum content.
2. Door closer body shall meet the requirements of ANSI Grade 1 per ANSI/BHMA 156.4.
3. Door closer body shall be fully closed rack and pinion construction.
4. Separate adjustable closing speed, latching speed, and backcheck shall be controlled by key operated valves with no less than one eighth inch hex.
5. Valves shall be captivated and non-critical.
6. Closer cover shall be constructed of high impact plastic material of flame retardant grade secured by machine screws.
7. Door closer body shall meet the requirements of UL 10C and UBC 7-2 positive pressure fire tests.
8. Door closer body shall have a ten year limited warranty.

F. Electro-mechanical holder release track assembly:

1. Devices shall include an integral, fully-adjustable hold-open mechanism.
2. Track assembly will accommodate operating voltages of either 24VAC or 24VDC in the same unit or 120VAC as an option.
3. Single-point hold open shall be adjustable from 85 to 110 degree of door opening.
4. Track assembly shall include a terminal strip for ease of installation.
5. Circuit board shall contain a self-resetting circuit breaker switch.
6. Track assembly shall include an on/off switch to control hold-open.
7. Integrated smoke detector unit shall be available as an option (12-prefix).
8. Two year limited warranty.

G. Door closer holders shall accommodate concealed or surface wiring standard.

H. Door closer holders shall have universal push or pull application.

2.0 MULTI-POINT CLOSER HOLDER RELEASE DEVICES

A. Multi-point door closer holder release devices shall be 2900 Series as manufactured by SARGENT Manufacturing Company, New Haven, CT.

B. Door closer holders shall meet ANSI/BHMA A156.15 requirements.

C. Provide door closer holders to hold doors open under normal use conditions and to release and close door upon receiving a signal from fire alarm, smoke detector, integral smoke detector, remote release switch, or manually by pushing or pulling the door.

D. Door closer holders shall be UL listed (US and Canada) for use on fire doors.

E. Door closer bodies with integrated hydraulic hold open mechanism:

1. One piece door closer body shall be die cast aluminum alloy with 14% silicon minimum content.
2. Door closer body shall meet the requirements of ANSI Grade 1 per ANSI/BHMA 156.4.
3. Door closer body shall be fully closed rack and pinion construction.
4. Separate adjustable closing speed, latching speed, and backcheck shall be controlled by key operated valves with no less than one eighth inch hex.
5. Valves shall be captivated and non-critical.
6. Cover shall be constructed of aluminum extrusion with plastic end caps secured by machine screws.
7. Door closer body shall meet the requirements of UL 10C and UBC 7-2 positive pressure fire tests.
8. Devices shall accommodate operating voltages of either 24VAC or 24VDC in the same unit or 120VAC as an option.
9. Multi-point hold open shall be adjustable from 10 to 170 degree of door opening.
10. Devices shall include a terminal strip for ease of installation.
11. Circuit board shall contain a self-resetting fuse.
12. Devices shall include an on/off switch to control hold-open.
13. Integrated smoke detector unit shall be available as an option (12-prefix).
14. Delayed adjustable hold-open shall be available as an option (80-prefix).
15. Two year limited warranty.

F. Door closer holders shall accommodate concealed or surface wiring standard.

H. Door closer holders shall be available in push or pull application for regular or double egress type doors.

ESSEX™
THE TOTAL OPENINGS PEOPLE

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Phone: 800-727-5477 • Fax: 888-863-5054 • Web site: www.sargentlock.com
SARGENT of Canada • Phone: 905-940-2040 • Fax: 905-940-3242 • Web site: www.sargentcanada.ca

Founded in 1864, SARGENT® is a market leader in locksets, cylinders, door closers, exit devices, electro-mechanical products and access control systems for new construction, renovation and replacement applications. The company's customer base includes commercial construction, institutional and industrial markets.

The ASSA ABLOY Group is the world's leading manufacturer and supplier of locking solutions, dedicated to satisfying end-user needs for security, safety and convenience.