

# 1431 Series

# Powerglide<sup>®</sup> Door Closer



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# 1431 Series Powerglide®

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The 1431 line of surface mounted door closers has been engineered to meet the demands of architects and building owners. The 1431 Series is a complete line of closers for interior and exterior doors with quality and flexibility to meet virtually every application.

# Primary Closer Arm Identification Letters

0	Standard Arm
Н	Hold Open Arm
Z	Deep Reveal Arm 2-1/8" to 5"
ZA	Extra Deep Reveal Arm 5-1/8" to 8"
Р	Parallel Arm or Push Side
S	Arm with Positive Stop
С	Arm with Positive Cushioned Stop
	"C" is always accompanied by an "S" (Stop)

Note: Often more than one letter is used to describe one type of arm

# **Underwriters' Laboratories Listing**

All SARGENT Powerglide $^{\otimes}$  Door Closers are listed by the Underwriters' Laboratories, Inc. as follows:



"For Self-Closing Doors Without Hold-Open Feature"

Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Sargent Manufacturing Company makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.

# On The Cover

• SARGENT 1431 Door Closer with US26 plated O arm and metal cover

# General Information

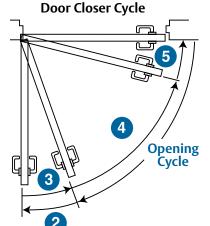
# 1431 Series Powerglide®

# Closer Spring Adjustment (not shown)

- Effects the entire cycle of the door closer movement
- Used to size closer for application requirements
- Determines the amount of force with which the door closes and the amount of force required to open the door
- Adjustable to compensate for door size and draft conditions

# 2 Backcheck valve

- At approximately 70° of the open cycle, the Backcheck Valve begins to slow the door's motion
- Prevents the door from slamming into the door's stop
- Valve is used to control the intensity of the Backcheck
- Note: A Positive stop is required, Backcheck cannot be used as a stop



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# **3** Delayed action valve (Optional)

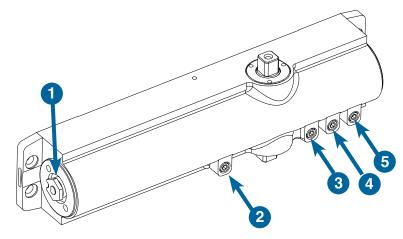
- Holds the door in the open position momentarily
- 20 second minimum hold open delay
- The feature is available for all applications and arms
- Beneficial when moving carts or objects thru door opening and ADA applications

# 4 Closing speed valve

 Controls how fast the door closes to approximately 8" from the closed position

# 5 Latching speed valve

- Controls the speed of the door during the final 8" of door swing
- The force the door closes with is controlled by the Closer spring
- Note: This adjustment is critical for door latching



# ANSI Standards

ARM	TYPE	ARM	TYPE
0	CO2011	PF9	CO2101
P9	CO2021	P10	CO2021
Н	CO2051	PS/CPS	CO2021
PH9	CO2061	CPSH/PSH	CO2061

All are certified ANSI types including options PT4 A, B, D, E, F, G, H

# Arm Leverage Adjustment

Closers using "O" arms have the provision to increase closing power by 15% by adjusting foot pivot



# How to Select the Proper Closer

### **Things to Consider**

### 1. Size and Weight of Door

The 1431 Door Closer is non-sized so that closing force can be adjusted in the field to accommodate various door sizes and weights.

### 2. Interior Application

The standard application is the most efficient in terms of power and control.

### 3. Exterior Application

The top jamb, parallel arm application should be used. Exterior doors require greater closing forces because of draft conditions. Always place the closers out of the weather.

### 4. Degree of Opening

Proper arm and position on the door is most important to permit the door to open far enough to allow adequate traffic flow.

### 5. Function

Closers are available with hold-open or positive stop arms.

### 6. Special Condition

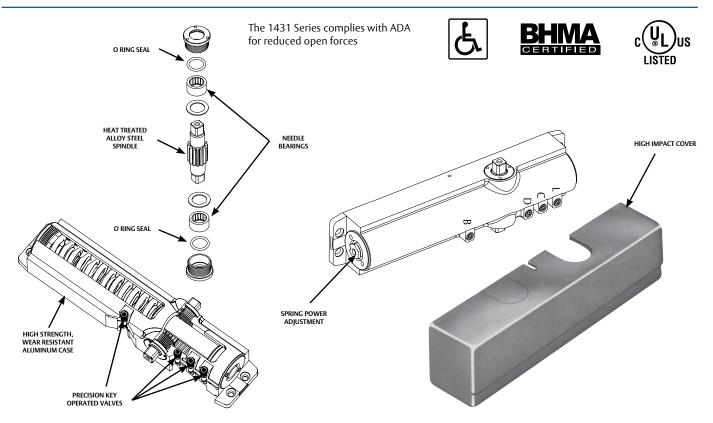
Consult factory when special hinges, overhead holders or other specialized hardware is used.

# Features and Benefits

# 1431 Series Powerglide®

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# Features

- Exceeds 15 Million cycles
- Certified ANSI/BHMA A156.4 Grade 1
- UL 10C listed for positive pressure fire test
- UL / cUL listed for use on fire rated doors
- 25 year limited warranty
- User friendly versatile mounting applications permit standard, top jamb, parallel and track installations
- Self sticking templates supplied for most applications
- Adjustable spring power allows 1431 closers a size range of 1 through 6. They are adjusted to size 3 before leaving the factory
- One door closer body for all applications. All 1431 are non-handed
- Meets ADA requirements in all applications, except Push Side Track application (except track)
- High impact non-corrosive plastic covers with two machine screws standard, metal covers and lead lined are optional
- All weather fluid allows closer to operate effectively in extreme temperatures without readjustment
- 1-1/2" diameter piston for superior door control
- Standard pressure relief valves for both opening and closing cycles protect the door and frame from damage caused by abuse
- Retrofits existing SARGENT 1230/1231 Series Closer installations

# Heavy Duty Construction

• Heat treated full rack and pinion for high

- strength and wear resistance
- Heavy duty one piece high silicon content aluminum alloy body provides corrosion resistance, superior strength and wear resistance
- 1/2" arm engagement over a 7/16 square spindle ensures a wear-resistant tight joint

# Fasteners

- Machine Screws and self tapping screws provided for closer and arm
- In addition, wood screws supplied when installed on wood doors with through bolts

# Valves

- Separate brass low sensitivity control valves offer ability to separately regulate door speed, latching, backcheck and optional delayed action
- All valves are captured to prevent accidental removal, adjustable with an 1/8" Allen wrench
- Adjustable backcheck protects the door and hardware from damage during the opening cycle
- Adjustable delayed action (optional) permits easy access for physically impaired individuals

# **Full Complement of Arm Types**

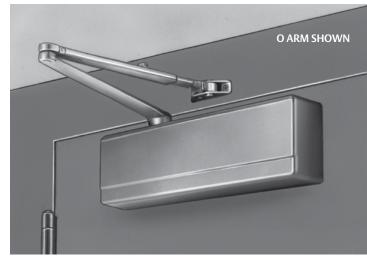
- Standard and parallel arms
- Push and pull track arms
- Heavy duty forged steel arms are finely finished and interchangeable between SARGENT 281 and 1431, and 351 Series. The cold formed arms (RO/RP9) are unique to the 1431 series and not interchangeable with other SARGENT closers

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# Standard Applications

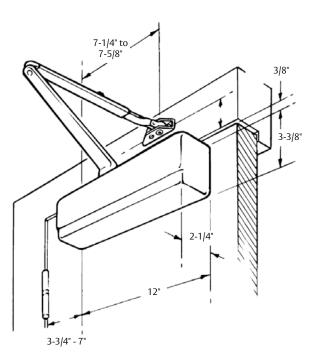
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The standard application of the 1431 door closer is the most common and the most desirable. The closer mounts on the hinge (pull) side of door (except when the W Corner Bracket is used). **Note:** This application is not recommended on exterior doors swinging out, since the closer is not protected from weather. The cover projection normally limits the door opening to a maximum of 160°.

# 1431-O Standard Application



# 1431 Standard Application for:

- Interior Doors Opening In or Out
- Exterior Doors Opening In

# 1431 Standard Application Door Opening Range

(Range based on Mounting Position)

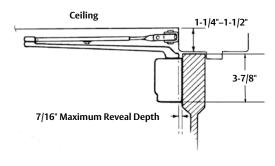
• O & RO Standard Arms: 120°–180°

• H- Hold Open Arm: 90°-180°

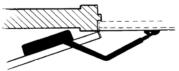
# OLC - Low Ceiling Application Arm for Ceiling to Door Clearance of 1-1/4" – 1-1/2"

Door Top Rail Requirement

- 2-5/8" min. rail (116mm)
- For Top Rails less than 3-3/4" with window opening, the 1431-J Cover Plate is recommended



# Wall Clearance Requirement



Cover Projection normally limits door opening to 160°

# Arms and Accessories for Standard Applications

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# O - Standard Arm

- Forged Steel Arm 
  11-1/4" (286mm) long
- Non-handed
- Permits 120° door opening with standard mounting

• Permits 180° door opening with alternate mounting or corner bracket

### For arm only, order as 25-O x finish Includes: 63-2607 - Main arm and link assembly

63-2216 - Foot assembly 64-2407 - Screw pack

# **O8 - Mortise Foot Arm**

- Forged Steel Arm 11-1/4" (286mm) long
- Non-handed
- Permits 120°

**UH Package** 

Universal hold

closer in top

or parallel

applications

jamb, standard

open arm package

provides brackets

and arms to install

- door opening
- Commonly used with bull nose frames For arm only, order as 25-08 x finish
- Includes: 63-2607 Main arm and link assembly 63-2273 - Foot assembly 64-2407 & 63-2391 - Screw packs

# RO Regular Arm

- Cold Formed Steel 
   Arm 11-1/4
   (286mm) long
- For reveal depths up to 2" (51mm)
- Arm is not handed
- Permits 180° door opening

For arm only, order as 25-RO x finish Includes: 63-3396 - Main arm and link assembly 63-2216 - Foot assembly 64-2407 Screw pack

# H8 - Mortise Foot Hold Open Arm

- Forged Steel Arm 11-1/4" (286mm) long
- Handed same as door
- Friction type holder easily adjusted by a wrench

Holds open from 80° – 180°

For arm only, order 25 R-H8 x finish for right hand or 25 L-H8 x finish for left hand Includes: 63-2229 - Main arm & link assembly

- 63-2289 Left hand foot assembly 63-2290 - Right hand foot assembly 63-2290RH - Foot assembly
- 64-2407 & 63-2391- Screw packs

# **UO/RUO Packages**

Universal arm
 package provides
 brackets and
 arms to install
 closer in
 standard
 top jamb or
 parallel applications
 Screw packs

125-P9

H - Hold Open Arm

# • Forged Steel Arm

# 11-1/4" (286mm) long

- Non-handed
  Hand is changed by inverting the
- foot assembly
  Friction type holder easily
  adjusted by a wranch
- adjusted by a wrenchPermits 180° door opening
- Holds open from 80° 180°
- Holds open from 80° –
   For arm only, order as 25-H x finish
  - Includes: 63-2229 Main arm and swivel assembly 61-2303 - Foot assembly 64-2407 - Screw pack

# OLC - Standard Arm for Low Ceiling

### Forged Steel Arm 11-1/4" (286mm) long

- Non-handed
- Must be used when the distance between the top of door to ceiling is less than 1-1/4" (32mm)
- Permits 120° door opening with standard mounting
- For arm only, order as 25-OLC x finish Includes 63-2549 - Main arm and link assembly 63-2216 - Foot assembly
  - 63-2216 Foot assemi 64-2407 - Screw pack

# 1431-W Corner Bracket

- Fastens securely to both the head and jamb
- Malleable iron, painted to match closer finish
- Non-handed
- Requires 1-1/4" (32mm) minimum wide stop
- Order as 1431-W x finish

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Screw packs

125-PH9

64-2407 & 63-2391



• Can be used to improve appearance when narrow door rail permits closer to be viewed through glass panel. Specify finish.

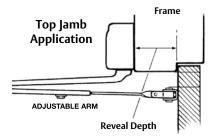


# **Top Jamb Applications** 1431 Series Powerglide®

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Top Jamb applications – The 1431 closer is mounted on the frame face above the door. The foot is mounted on the push side of door. This application is for use on exterior doors opening out to protect the closer from the weather.



# 1431-O Typical Reveal Top Jamb Applications

For reveals up to 2" (51mm) maximum

- O or RO Arms Max. Door Opening: 180°
- H Arm Hold Open Range: 80° 180°

# 1431-OZ Deep Reveal Top Jamb Applications

For reveals from 2-1/8" (54mm) to 5" (127mm) • OZ Arm - Max. Door Opening: 140°

- HZ Arm Hold Open Range: 80° 140°
- 1431-OZA Extra Deep Reveal Top

# Jamb Applications

For reveals from 5-1/8" (130mm) to 8" (230mm)

- OZA Arm Max. Door Opening: 140°
- HZA Arm Hold Open Range: 80° 130°

# **Minimum Frame Face Required**

• 1-3/4" (44mm) for both single and double rabbeted frames

# Minimum Door Top Rail Required to **Mount Closer Foot**

• 1-7/8" (48mm) minimum

narrow face frames

Order as 1431-B x finish

Non-handed

Available w/powder coat or

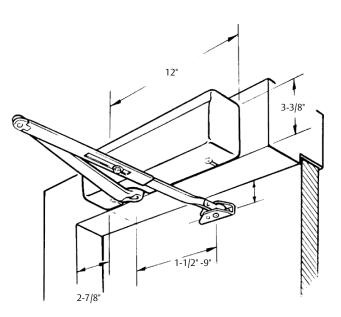
plated finish to match cover

0 0

•

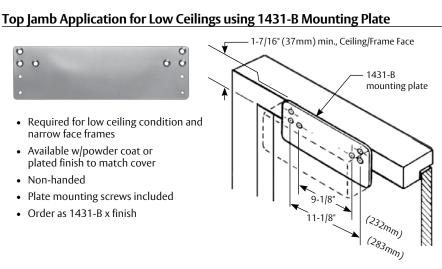
Rail height required depends on type and • make of auxiliary holder if used

# 1431-O Top Jamb Mounting Position



# Adjustable Closing Force

- Interior doors to 5'0" wide
- Exterior doors to 4'0" wide
- Shipped factory preset for 3'0" door
- Factory pre-sized upon request



# Arms for Top Jamb Applications

# **Narrow Reveal Arms**

# O - Standard Arm

- Forged Steel Arm 11-1/4" (286mm) long
- For reveals up to 2" (51mm)
- Non-handed
- Permits 180° door opening

For arm only, order as 25-O x finish Includes: 63-2607 - Main arm and link assembly 63-2216 - Foot assembly 64-2407 - Screw pack

# **RO Regular Arm**

- Cold Formed Steel Arm 11-1/4" (286mm) long
- Non-handed

24-2407 - Screw pack

- Permits 120° door opening with standard mounting
- Permits 180° door opening with alternate mounting or corner bracket

For arm only, order as 25-RO x finish Includes: 63-3396 - Main arm and link assembly 63-2216 - Foot assembly

# H - Hold Open Arm

- Forged Steel Arm 11-1/4" (286mm) long
- For reveals up to 2" (51mm) Adjustable friction
- holder
- Permits 180° door opening

Includes 63-2229 - Main arm and link assembly 61-2303 - Foot assembly 64-2407 - Screw pack

# **Deep Reveal Arms**

### **OZ** - Standard Arm for Deep Reveals

- Forged Steel Arm ٠ 11-1/4" (286mm) long
- For reveals from 2-1/8" (54mm) to 5" (127mm)
- Non-handed
- Permits 140° door opening
- Permits 140° door opcom
   Permits 140° door opcom
   For arm only, order as 25-0Z x finish
   includes:
   63-2607 Main arm and link assemt
   63-2217 Foot assembly
   64-2407 Screw pack 63-2607 - Main arm and link assembly

# HZ - Hold Open Arm for Deep Reveals

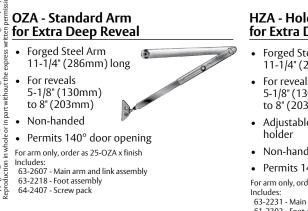
- Forged Steel Arm ٠ 11-1/4" (286mm) long
- For reveals from 2-1/8" (54mm) to 5" (127mm)
- Adjustable friction holder

0

- Non-handed
- Permits 140° door opening

For arm only, order as 25-HZ x finish Includes: 63-2230 - Main arm and link assembly 61-2303 - Foot assembly 64-2407 - Screw pack

# **Extra Deep Reveal Arms**



# HZA - Hold Open Arm for Extra Deep Reveal

- Forged Steel Arm 11-1/4" (286mm) long
- For reveals 5-1/8" (130mm) to 8'' (203mm)
- Adjustable friction
- Non-handed
- Permits 140° door opening
- For arm only, order as 25-HZA x finish

63-2231 - Main arm and link assembly 61-2303 - Foot assembly 64-2407 - Screw pack





For arm only, order as 25-H x finish

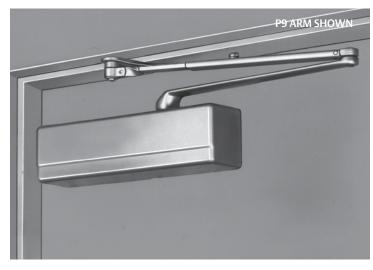






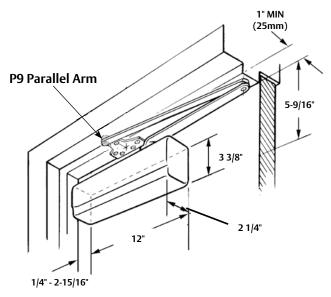
# Parallel Arm Applications 1431 Series Powerglide®

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Parallel Arm Applications – The 1431 closer is mounted on the push side of the door with the arm under the frame parallel to the face of the door. This application is well suited for narrow face frames and deep reveal applications. The closer arm does not project into the room, and the door can be swung open much farther than in Top Jamb Application.

# 1431-P9 Regular Parallel Arm Application



# **Heavy Duty Parallel Arms**

# For use in high traffic and abusive environments

- Friction and positive hold open arms available
- Use friction hold open arms for doors subject to moderate hold open use
- Use positive stop hold open arms for doors subject to frequent hold open use
- Dead stop and compression stop arms available

# Non hold-open arms

Two mounting positions for 120° and 180° maximum door openings

### Stop arms

 6 mounting positions allow stop from 85° – 110°

### Positive stop hold open arms

 6 mountings provide hold open positioning from 85° – 110°

# Friction hold open arm

 Two mountings provide adjustable hold open positions from 75° – 180°

# **Regular Duty Parallel Arms**

# Available Arms for institutional installations:

- Regular Duty Parallel Arms
- Offset Bracket Arms for use with Auxiliary Holders & Stops
- Parallel flush frame arms
- Flush frame arms for use with Auxiliary Holders & Stops
- Flush frame, friction hold open arms
- Friction hold open arms
- Use friction hold open arms for doors subject to moderate hold open use

### **Standard Mounting Position**

- 120° Maximum door opening
- Holding range of friction hold open arms: 75° 110°

# Alternate Mounting Position

- Maximum door opening: 180°
- Holding range of friction hold open arms: 85° – 170°

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# Heavy Duty Parallel Arms

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# P10 - Heavy Duty Parallel Arm



- Forged Steel Arm 11-1/4" (286mm) long
- Non-handed
- Easily installed
- Permits 120° opening at standard mounting
- Permits 180° opening at alternate mounting

For arm only, order as 25-P10 x finish Includes: 63-0641 - Main arm

63-3727 - Arm and bracket assembly 64-2407 & 63-2392 - Screw packs

# PH10 - Heavy Duty Friction Hold **Open Parallel Arm**



- Equipped with adjustable friction holder
- Adjustable hold open from 75° 180°
- Forged steel arm 11-1/4" (286mm) long
- Handed same as door
- Use friction hold open arms for doors subject to moderate hold open use

For arm only, order as 25-PH10 x finish Includes: 63-0641 - Main arm

63-3839 - Left hand arm and bracket assembly 63-3840 - Right hand arm and bracket assembly 64-2407 & 63-2392 - Screw packs

# PS - Heavy Duty Parallel Arm with



- Forged Steel Arm 11-1/4" (286mm) long
- Handed arm is field-reversible
- Provides built in stop from 85° 110°
- Permits 110° opening maximum
- Easily installed

### • Permits 85° – 110° door opening For arm only, order as 25-PS x finish

Arm with positive Stop

Includes: 63-0641 - Main arm 63-3837 - Arm and bracket assembly 64-2407 & 63-2392, 63-2396 - Screw packs

**PSH - Heavy Duty Parallel Hold Open** 

Provides holder and stop features

• Permits 85° – 110° door opening

63-3833 - Arm and bracket assembly 64-2407 & 63-2392, 63-2396 - Screw packs

• Handed arm is field-reversible

Easily installed/adjusted

For arm only, order as 25-PSH x finish

Includes: 63-0641 - Main arm

# **CPS - Heavy Duty Parallel Arm with Compression Stop**



- Forged Steel Arm 11-1/4" (286mm) long
- Provides built in compression stop from 85° – 105°
- Permits 105° opening maximum
- Easily installed
- Handed arm is field-reversible
- Dead stop within 3°

For arm only, order as 25-CPS x finish Includes: 63-0641 - Main arm 63-3830 - Arm and bracket assembly 63-0516 - Bumper holder

63-3493 - Bumper 64-2407 & 63-2398 - Screw packs

# CPSH - Heavy Duty Hold Open Parallel Arm with Compression Stop



- Forged Steel Arm 11-1/4" (286mm) long
- Handed arm is field-reversible
- Provides built in compression stop and holder mechanism from 85° - 105°
- Easily installed/adjusted
- Permits 105° opening maximum
- Dead stop within 3°
- For arm only, order as 25-CPSH x finish

63-0641 - Main arm 63-3836 - Arm and bracket assembly Includes:

- 63-0516 Bumper holder
  - 63-3493 Bumper 64-2407 & 63-3487 Screw packs

# Positive Stop Hold Open Arms (PSH & CPSH ARMS)

- Use on doors subject to repetitive hold open use
- 6 hold open angle installation
- Hold open function may be disengaged
- Hold open tension is easily adjustable

The PSH and CPSH arms project 2 3/4" below the head stop

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# Positive Stop

# Regular Duty Parallel Arms

# **Hold Open Arms**

# PH4 - Flush frame, Friction Hold **Open Arm**

- Forged Steel Arm 11-1/4'' (286mm) long
- Holds open from 75° – 180°
- Easily adjusted by wrench
- Non-handed
- Use on frames where stop or soffit is too narrow to mount the standard hold open foot bracket

### For arm only, order as 25-PH4 x finish Includes: 63-2229 - Main arm and link assembly 61-2303 - Foot assembly 64-0050 - Foot bracket 64-2407 & 63-2391 - Screw packs

# **Offset Bracket Arms**

# P3 - 1" Offset Bracket for use with Auxiliary Holder/Stop

- Forged Steel Arm 11-1/4" (286mm) long
- For use with auxiliary surface overhead stops and holders
- Foot bracket is offset 1" more than P-9, allowing door closer to be lowered on door face
- Non-handed
- For arm only, order as 25-P3 x finish Includes: 63-2607 - Main arm and link assembly 63-2270 - Foot assembly 64-2407 & 63-2391 - Screw packs

# P4 - Parallel Flush frame Arm

- Forged Steel Arm 11-1/4" (286mm) long
- Foot bracket is attached to frame or transom face
- For use where stop or soffit is too narrow for the standard P9
- Permits 120° opening with standard mounting
- Permits 180° opening with alternate mounting
- Non-handed
- For arm only, order as 25-P4 x finish
- Includes: 63-2607 Main arm and link assembly 63-2295 - Foot assembly 64-2407 & 63-2391 - Screw pack

# PH9 - Friction Hold Open Arm

- Forged Steel Arm 11-1/4" (286mm) long
- Holds open from 75<sup>°</sup> – 180°
- Easily adjusted by wrench

# Non-handed

For arm only, order as 25-PH9 x finish Includes: 63-2229 - Main arm and link assembly 61-2303 - Foot assembly 64-0039 - Foot bracket (125 PH9) 64-2407 & 63-2391 - Screw packs

# P3A - 1-3/4" Offset Bracket for use with Auxiliary Holder/Stop

- Forged Steel Arm 11-1/4" (286mm) long
- For use with auxiliary surface overhead stops and

holders and door coordinators

- Foot bracket lowers door closer an additional 3/4" below P3 bracket
- Non-handed
- For arm only, order as 25-P3A x finish Includes: 63-2607 - Main arm and link assembly 63-2274 - Foot assembly 64-2407 & 63-2391- Screw packs

### P4A - Flush Frame Arm for use with Auxiliary Holder/Stop

- Forged Steel Arm 11-1/4" (286mm) long
- For use with auxiliary surface overhead stops and holders
- Foot bracket is attached to frame or transom face
- Foot bracket lowers door closer an additional 3/4" below P4 bracket
- Non-handed

For arm only, order as 25-P4A x finish Includes: 63-2607 - Main arm and link assembly 63-2272 - Foot assembly 64-2407 & 63-2391 - Screw packs

# **RP9 Regular Arm**

- Cold Formed Steel Arm 11-1/4" (286mm) long
- Arm is not handed
- Permits 120° opening with standard mounting • Permits 180°
- opening with alternate mounting
- For arm only, order Includes: 63-3396 Main arm and link assembly 63-2271 - Foot assembly 64-2407 & 63-2391 Screw Packs

# P9 - Standard Parallel Arm

- Forged Steel Arm 11-1/4" (286mm) long
- Non-handed
- For arm only, order as 25-P9 x finish Includes: 63-2607 Main arm and link assembly 63-3405 - Foot assembly 64-2407 & 63-2391 - Screw packs

# **UO/RUO Packages**

• Universal arm package provides arms and brackets to install closer in standard top jamb or parallel application Screw packs 64-2407 & 63-2391

# **UH Package**

1-800-727-5477 • www.sargentlock.com

• Universal hold open arm package provides brackets and arms to install closer in top jamb, standard or parallel applications 125-PH9 Screw packs 64-2407 & 63-2391



125-P9

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# Accessories for Parallel Applications

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# **Heavy Duty Parallel Accessories**

# 581-2 Blade Stop Spacer Kit



- For frames with 1/2" blade stops
- For use with P10, PH10, PS, PSH, CPS and CPSH arms
- 125-V bracket included
- Packed with 1-1/4" long screws
- Use P/N 64-0157 to order blade stop only

# **Regular Duty Parallel Accessories**

# 125-P3 Arm Conversion Unit

• Converts O or P9 arm to P3 Parallel Arm



# 125-P4 Conversion Unit

• Converts O or P9 Arm to P4A Arm



# **Miscellaneous Accessories**

# 1431 J Cover Plate



• Can be used to improve appearance when narrow door rail permits closer to be viewed through glass panel

# 585 Retrofit Kits

The 585 kit allows easy upgrade from existing 1230/1231 Series to the 1431 Series. Kit includes closer, full cover, and fasteners.

585-2 Replaces 1230/1231 585-4 Replaces 1230 DA/1231 DA

# 125-V/125-VF Brackets



### 125-V

For use with all heavy duty parallel arms

125-VF

- Use 125-V for narrow stop and frame conditions
- Use 125-VF for flush door and frame conditions

125-P3A Arm Conversion Unit

125-P4A Arm Conversion Unit

• Converts O or P9 arm to P4A Arm

Converts O or P9 Arm to

P3A Parallel Arm

1431 Drop Plate

# Spacer 63-0191

- 1/2" x 5/8"
- Included standard with PS, PSH, PH10, P-10 CPS and CPSH arm for use with rabbited frames





125-PH9 Parallel Arm Foot



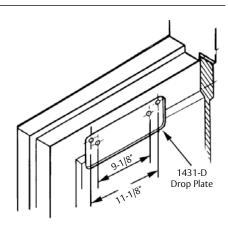
# 581-1 Blade Stop Spacer Kit



- For frames with 1/2" blade stops
- For use with P9, PH9 and PF9 arms only
- Packed with 1-1/4" long screws



- Required for parallel arm applications with top rails less then 5-3/4"
- Requires 3" (76mm) minimum top rail
- Available with powder coat or plated finish to match closer
- Non-handed Plate mounting screws included
- Order as 1431-D x finish





90121:M12/03/15

# Track Type Applications 1431 Series Powerglide®

# SARGENT ASSA ABLOY

# Pull Side Mounting (Hinge Side)



# Push Side Mounting (Stop Side)



1431 Track Type Closer – Offers the most decorative door closer providing a clean unobstructed appearance without the cost of concealed closers and tracks. With versatile mounting options on either side of the door, the 1431 track type closers are a favorite of interior designers.

# **OT Track Arm**

- Track mounts on frame face "OT"
- Minimum top rail required 2-3/8"
- Mounting plates cannot be used for this application

### **Maximum Door Opening**

- 160° with standard track
- 120° with optional bumper track
- 180° with ideal conditions for standard track

# **Hold Open Range**

• 85° – 120°

# POT Track Arm

- Track mounts on frame stop "POT"
- Minimum top rail required without drop plate: 4-3/4" (121mm)
- With 1431D Drop Plate 3" (76mm)

# Maximum Door Opening

- 100° with standard track
- 95° with optional bumper track

# **Hold Open Range**

• 85° – 95°

# **Minimum Stop Required**

• 1-9/16" (40mm) wide

# OD Double Egress Arm



- Special frame profile required
- Available with Holder Option (HD) and Bumper Option (B)
- 160° maximum door opening
- 120° opening with bumper option
- Range of hold open 85° 120°
- Used with reveals 3" 4" (76mm-102mm)

Order as 25-OD x finish for track and arm assembly

Includes: 63-2447 - Track assembly 63-3656 - Left hand arm 63-3657 - Right hand arm

# Track

- Extruded aluminum track
- End caps finished to match track

### Arm

- Forged steel
- Bearing roller

# Bumper (Optional)

- Mounts in track to assist backcheck
- Not designed to be used as a stop
- Auxiliary stop is required
- Available for both regular or hold open tracks

# Holder (Optional)

• Mounts within the track (adjustable)

# Finishes

• EAB, EB, ED, EN, EP powder coat on all exposed surfaces

ſ	1431—OT	Pull
[	1431—OTB	Pull with Bumper
l	1431—HT	Pull with Holder
	1431—HTB	Pull with Holder and Bumper
l	1431—OD	Pull Double egress (Handed) (Non-standard frame required)
l	1431—ODB	Pull Double egress with Bumper (Handed) (Non-standard frame required)
	1431—HD	Pull Double egress with Holder (Handed) (Non-standard frame required)
ſ	1431—HDB	Pull Double egress with Holder and Bumper (Handed) (Non-standard frame required)
ſ	1431—POT	Push
ſ	1431—POTB	Push with Bumper
ſ	1431—PHT	Push with Holder
ſ	1431—PHTB	Push with Holder and Bumper

Note: Two mounting applications are available

Arm & Track | Description/Options

# Suggested Architect's Specifications, ADA Compliance and General Information

# 1431 Series Powerglide®

# **General Information**

# Special Conditions

The SARGENT Website (www.sargentlock.com) contains templates for all standard applications of SARGENT Door Closers with SARGENT overhead door holders. To insure a satisfactory installation for other holders, it is recommended that complete details be submitted as follows:

- Type, size and make of holder
- Holding position (maximum door opening)
- Submit holder template being used
- · Closer application being used
- Size and type of hinge

In the case of an unusual door, frame and/or hinge conditions where regular products do not meet requirements, submit drawings and complete details specifying the degree of door openings required, the type and size of hinge and the max. door opening angle.

# Architectural Specifications

- 1. All closers for both interior and exterior doors shall be the product of one manufacturer and be matched in style.
- Surface closers shall be adjustable to provide sizes 1 through 6 and comply with ADA. 2.
- 3. Full rack and pinion construction.
- Closing speed, latching speed and backcheck shall be controlled by key 4. operated valves.
- Delayed action feature shall be available and controlled by a separate valve. 5 Delayed action shall be available in addition to, not in lieu of, backcheck.
- The one piece closer body shall be manufactured of high-performance cast aluminum silicon alloy.
- An increase of 15% in closing power shall be provided by means of adjustment 7. of the arm leverage at the foot connection. (Standard Arm)
- All arms shall be finely finished with heavy duty forged steel main arm. 8.
- 9. Two mounting positions of the closer shall meet all requirements. Standard mountings shall provide 120° door opening and alternate mounting 180° door opening.
- 10. All closers shall be suitable for standard, corner bracket, top jamb, parallel arm and track type applications when provided with proper brackets and arms.
- 11. Closer covers shall be of high impact plastic material of flame retardant grade, secured by machine screws.
- 12. Projection of closer body from door shall not exceed 2-1/4" (57mm) with standard cover.
- 13. Closers shall be non-handed to meet a variety of door conditions and design requirements.
- The spindle shaft shall be sealed hydraulically with an "O" ring. 14.
- 15. Specify desired options such as: Metal Cover, Security Package, (SRI) Special Rust Inhibitor Process, (TB) Through-bolting, (DA) Delayed Action and Architectural Plated Finishes.
- 16. Closers should have two pressure relief valves (opening and closing cycles).
- 17. All closers to have a 25 year limited warranty.
- 18. Closers should comply with UL-10C and UBC 7-2 (1997) Positive Pressure Fire Test.

# 1431 Designed to Aid the Physically Challenged



The 1431 door closer is designed to meet the opening force requirements established by the American with Disabilities Act (ADA) limiting the opening force to 5 pounds for interior doors and 8 pounds for exterior doors. The closer should be installed using the alternate mounting given on the templates when used on interior doors.

CAUTION: The entire opening should be reviewed when ADA requirements must be met. Heavy doors add to the opening force while requiring more force to close. Poor quality hinges will add frictional resistance to the door and require more force to open and close. HVAC imbalances can cause a wind load that may also add to the opening forces. In these applications, a manual door closer may be unable to reliably close and latch a door when adjusted to ADA requirements. In these situations, a SARGENT low energy door operator should be used.

# Through-bolting and Mortise Nuts

SARGENT

ASSA ABLOY

- When through-bolting is ordered, factory will furnish mortise nuts for use with the machine screws furnished with the closer
- Nuts are sized to accommodate 1-3/4" (44mm) standard or 1-3/8" (35mm) thick doors when specified on order
- For 2-1/4" (57mm) thick doors, longer through-bolts will be furnished with mortise nuts
- Through-bolting for 2-1/4" (57mm) thick hollow metal doors require bridge type reinforcement to prevent collapse of top rail when through-bolts are tightened

# Special Rust Inhibitor Process (SRI)

The aluminum body of the 1431 provides a high level of corrosion protection in many environments. An additional process (SRI) is available to provide the arms an extra layer of protection for extreme corrosive environments. Specify SRI as an option when ordering.

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# Door Closer and Overhead Stop/Holder Compatibility Chart 1431 Series Powerglide®

# Introduction to SARGENT Overhead Holders and Stops

SARGENT overhead holders/stops are designed to protect the door and hardware from the abuse commonly found in commercial and institutional applications. With **four different series** that include **surface** or **concealed**, **standard** or **heavy duty**, SARGENT has a holder/stop for your application.

Overhead holders/stops are the most practical method of stopping a door as well as eliminating unsightly wall stops and dangerous floor stops. Using an overhead holder/stop distributes abusive forces rather than concentrating them toward the hinge. Some door closers are available with incorporated holders/stops. These work well in most cases, but when subjected to continuous abuse can lead to frame and hinge failure. SARGENT overhead holders/stops are designed and manufactured for years of service and come with a 5 year warranty.

# Frequently Used Overhead Stops used with the 1431 Series

1431-P3 shown w/1548S Standard Door Closer Applications (PULL SIDE MOUNT) Not Shown 590 Series with 1431 Series "O" Arm P3 ARM 690 Series with 1431 Series with "O" Arm 1530 Series with 1431 Series with "O" Arm 1540 Series with 1431 Series with "O" Arm **Overhead Stop/Holder**  Parallel Arm Door Closer Applications (PUSH SIDE MOUNT) 590 Series with 1431 Series "P3" Arm 690 Series with 1431 Series with "P9" Arm 690 Series with 1431 Series with "P10" Arm 4-1/16 (103mm) 1530 Series with 1431 Series with "P9" Arm 1530 Series with 1431 Series with "P10" Arm 1540 Series with 1431 Series with "P3" Arm 1431 0Z shown w/597S • Parallel Arm Door Closer Applications Used with a Flush Frame 590 Series with 1431 Series "P4" Arm Frame 690 Series with 1431 Series with "P4" Arm 1530 Series with 1431 Series with "P4" Arm 590 1540 Series with 1431 Series with "P4" Arm Door • Top Jamb Applications 590, 690, 1530, 1540 Series with 1431 Series with "O" OZ or OZA Arm Note: This chart is only a quick reference. Some applications may require the use of a 145 or 195 angle bracket For applications not shown, refer to the SARGENT Overhead Holders & Stop catalog

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# How to Order

# 1431 Series Powerglide®

# ASSA ABLOY

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# Packing

All closer assemblies are packaged 4 per carton. On request, door closers will be packed 2 per carton.

# How To Order

CPC-DA	1431	P4H	26	LH
Options	Series	Closer Arm	Finish	Hand
31-	1431	Standard	EB	LH
36-		Page 4	ED	RH
74-			EN	
CPC		Top Jamb	EP	
DA-		Page 6	EAB	
MC-			03*	
SG-		Parallel	04*	
SRI-		Pages 8 & 9	09*	
TB-			10*	
		Track Type	10B*	
		Page 11	10BE	
			10BL*	
			14*	
			15*	
			20D*	
			26*	
			26D*	

\* These finishes are automatically provided with a metal cover

# How To Order

Accessories	Example	
Arm only	Specify 25-, arm required and finish	25-PSH EN
Body only	Specify CB-1431 (Option DA- available)	CB-1431
Arm conversion Units	Specify unit and finish	125-P9 EB
Cover Only (Standard)	1431-C x finish	1431-C x EN
Cover Only (Metal)	1431-CMC x finish and hand & arm type	1431-CMC x 26D x LH X P-10
Accessories	Specify accessory and finish See applicable catalog section	1431-D EB

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Series		Number per Carton	Approx. wt per Carton	
	1431	4-Standard (2 upon request)	19 lbs. per 4	l

# **Options Available**

Specify	Detailed Description	
31-	For doors 1-7/8" – 2-1/4" thick, specify door thickness, doors over 2-1/4" thick contact factory	
36-	Security Torx Screws supplied for all exposed fasteners	
74-	Lead lined cover	
CPC-	Clear Powder Coat (available on 26 & 26D)	
DA-	Delayed Action	
MC-	Handed Metal Cover	
SRI-	Special Rust Inhibitor finish for powder coated finishes only (arm)	
TB-	Through Bolt (1-3/4" Std) For others, specify 31-TB- & door thickness	

### Note:

Hinge

• The MC- option is used when a metal cover is desired on a powder coated finish

PULL SIDI

PUSH SIDE

LEFT HAND DOOR

- When MC- is added to a plated finish, the MC- option indicates that only the cover is to be plated, the arms will be powder coated to match
- Do not specify the MC option if both the cover and arms are to be plated

# Special Rust Inhibitor

ordering.

**RIGHT HAND DOOR** 

Process (SRI) Additional process available for bracket and arms provides an extra layer of protection for extreme corrosive environments. Available with powder coated finishes only, specify SRI- as an option when

PULL SIDE

PUSH SIDE

Hinge

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Finishes

Finishes           EB           EN           ED           EAB           EP           03           04           09           10           10B           10BL           14	ANSI/BHMA	Description
EB	695	Bronze powder coated to match finish 10B
EN	689	Aluminum powder coated
ED	693	Black powder coated to match finish 20D
EAB	696	Brass powder coated
EP	691	Bronze powder coated to match finish 10
03	605	Bright brass, clear coated
04	606	Satin brass, clear coated
09	611	Bright bronze, clear coated
10	612	Satin bronze, clear coated
10B	613	Dark oxidized satin bronze, oil rubbed
10BE	613E	Dark oxidized satin bronze - equivalent
10BL	614	Oxidized satin, bronze, clear coated
14	618	Bright nickel plated, clear coated
15	619	Satin nickel, clear coated
20D	624	Statuary dark bronze, clear coated
26	625	Bright chromium plated
26D	626	Satin chromium plated



SARGENT Manufacturing Company 100 Sargent Drive New Haven, CT 06511 USA 800-727-5477 www.sargentlock.com ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience

Founded in the early 1800s, 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. Copyright © 2005-2007, 2009-2015, Sargent Manufacturing Company, an ASSA ABLOY Group company. All rights reserved. Reproduction in whole or in part without the express written permission of Sargent Manufacturing Company is prohibited.