



#### **DESIGN HARDWARE** 116 Series Heavy Duty

116AL - Aluminum Painted Meets ANSI A156.4 - Grade 1 Standards UL Listed for "A" Label 3 Hour Fire Doors, UL10C Positive Pressure Rated Meets ADA requirements ANSI A117.1 Heavy Duty Cast Aluminum Closer Body with Rack & Pinion Construction Heat Treated Heavy Duty Steel Piston, Spindle & Spring Adjustable Spring Power from Size 1-6 - Factory preset at size 3 Independent Latch & Sweep Speed Back Check Intensity Control Standard Staked Valves to prevent backing valves out too far Plastic Pinion Cap & PA Bracket

Molded Plastic Cover available separately CTC Hole Pattern: 9 1/16" CTC Horizontally x 3/4" CTC Vertically116 Template

2 7/8" projection without cover Minimum Top Rail: Regular Arm: 3 1/8" - Top Jamb: 17/8" - Parallel

Machine screws & Thru Bolts, Wood screws & Self tapping machine screws

Includes all screws and brackets for Regular, Top Jamb and Parallel Arm

Accessories: Hold Open Arms, Heavy

**DHW 116 AL CLOSER** 

Arm: 5 3/4"

DHW 116 B7 CLOSER



#### **DESIGN HARDWARE** 316 Series Heavy Duty

included

ANSI: Meets ANSI A156.4 - Grade 1 Standards UL Listings: "A" Label 3 Hour Fire Doors, UL10C Positive Pressure Rated ADA Compliance: Meets ADA requirements ANSI A117.1 Closer Body: Heavy Duty Cast Aluminum Closer Body, Rack & Pinion Const. Piston, Spindle, Spring: Heat Treated Heavy Duty Steel Piston, Spindle & Spring Spring Sizing: Adjustable Spring Power from Size 1 to 6 - Preset at size 3 Speed Controls: Independent Latch & Sweep Speed Controls Back Check: Back Check Intensity Control Standard Valves: Staked Valves to prevent backing valves out too far Covers: Molded Plastic Cover included - Metal cover included

CTC Hole Pattern: 12" CTC Horizontally x 3/4" CTC Vertically Projection: Slim 2 1/8" projection with cover installed Minimum Top Rail : 3 1/2" - Top Jamb: 2 1/4" - Parallel Arm: 5 1/4" Fasteners:Thru bolts with machine screws, Wood screws & Self tapping machine screws included

Mounting Styles: Includes all screws and brackets for Regular, Top Jamb and Parallel Arm Installations Accessories: Hold Open Arms, Heavy Duty Arms, Drop Plates, Extended Arms & more.

Warranty: Limited Lifetime Warranty

DHW 316 AL CLOSER

**DHW 316 BZ CLOSER** 

DHW 316R AL CLOSER w/RETROFIT **PLATE** 



#### **DESIGN HARDWARE** 416 Series Heavy Duty

with US3 & US26 finish

ANSI: Meets ANSI A156.4 - Grade 1 Standards UL Listings: : For "A" Label 3 Hour Fire Doors, UL10C Positive Pressure Rated ADA Compliance: Meets ADA requirements ANSI A117.1 Closer Body: Heavy Duty Cast Iron Closer Body with Precision Rack & Pinion Construction Piston & Spindle: Heat Treated Steel Piston & Spindle with Needle Bearings for Smooth Operation Springs: Heat Treated Heavy Duty Tempered Spring for up to 250lb door Spring Sizing : Adjustable Size 1 to 6 - Factory set at size 3 Speed Controls: Independent Latch & Sweep Speed Controls Back Check: Adjustable Back Check Intensity Control Valve Valves: Staked Valves to prevent backing valves out too far

Standard Cover: Molded Plastic Cover included for finished look Optional Cover: US26D Metal Cover available separately
CTC Hole Pattern: 2 holes 1" CTC, 3" CTC horizontal x 2 1/4" CTC vertical Projection: 2 1/4" projection with cover installed416 template drawing Minimum Top Rail: Regular Arm: 3 3/4" - Top Jamb: 1 1/4" - Parallel Arm: 5 3/8" Fasteners : Thru holts with machine screws, Wood screws & Self tapping machine screws included Mounting Styles: Includes all screws and brackets for Regular Arm, Top Jamb and Parallel Arm Installations Accessories: Hold Open Arms, Heavy Duty Arms, Drop Plates, Extended Arms & more. Warranty: Limited Lifetime Warranty

DHW 416 AL CLOSER

**DHW 416 BZ CLOSER** 

### **CLOSERS**



# DORMA 8600 Series door

Grade 1 Surface Applied Door

The 8600 door closer series is a nonhanded surface applied door closer with adjustable spring power and backcheck positioning adjustment. It provides the flexibility needed to meet the many demands of commercial and institutional applications, including ADA barrierfree accessibility requirements.

Door closer ANSI/BHMA Grade 1 certified. Adjustable spring sizes and power Meets barrier-free requirements Adjustable backcheck

Backed by 25-year warranty

DOR 8616 AF86P COV SNB1 689

DOR 8616 AF86P COV SNB1 695

DOR 8616 AF86P FC SNB1 689

DOR 8616 AF86P FC SNB1 695



#### FALCON SC60A Series Closer

This light- to medium-duty closer is designed for commercial applications like a small boutique or office. The SC60A Series is designed for light- to medium-duty applications, like a small business or office building. It is intended for interior use with aluminum storefronts and mixed use complexes. It mounts three ways and features the most common hole pattern in the door control industry, making it ideal for a variety of retrofit needs.

The SC60A Series features a singlepiece cast aluminum body and a 1-3/8" heat-treated steel piston, a heattreated pinion and staked valves. The SC60A Series standard door closer is certified ANSI/BHMA A156.4 Grade 1, is UL listed and is backed by a 10-year

FAL SC61A CLOSER RWPA ALUM

FAL SC61A CLOSER RWPA 695



#### FALCON SC70A CLOSER

Falcon SC70A Series heavy duty closers are built for applications demand reliable door control and easy maintenance. The SC70A Series closers are ANSI grade 1, ADA compliant and deliver tough performance. Choose the SC70A for interior or exterior doors in retail shops, restaurants, small offices, and many other high traffic applications, Standard features Fully adjustable sizes 1-6 Separate adjustable general speed, latch speed and backcheck Closer mounts hinge side, top jamb, or parallel arm when either the RW/PA or HW/PA arm is specified Non-handed for left or right swinging doors 1 1/2' diameter heat treated steel piston

Double heat-treated pinion Universal screw pack for aluminum, hollow metal, and wood doors, includes self reaming and tapping screws. Staked valves Meets ANSI A117.1 Listed ANSI/BHMA A156.4, grade 1 UL listed and compliant to UL10C and UBC 7-2 (1997) Fast and easy installation 10-year warranty Available in aluminum, brass, dark bronze, and matte black

FAL SC71A FC CLOSER RWPA ALUM



#### FALCON SC80A CLOSER

The SC80A Series is a mediumduty closer made for light- to medium duty applications, both interior and exterior. It is ideal for side doors, closets and bathrooms in schools, retail shops. restaurants, and small office buildings. The closer's adjustable design provides flexible installation and ADA compliance. including adjustable spring sizes and a non-handed design. The SC80A Series also features 1-1/4" heat-treated steel pistons and heat treated pinions. The single-piece aluminum body is designed and tested to

ANSI/BHMA A156.4 Grade 1 standards and is also backed by a 10-year warranty.

FAL SC81A FC CLOSER RWPA BLACK

FAL SC81A FC CLOSER RWPA ALUM

FAL SC81A FC CLOSER RWPA BRONZ

FAL SC81A FC CLOSER HWPA BLACK (FRICTION HOLD OPEN ARM WITH PA BRACKET)

FAL SC81A FC CLOSER HWPA ALUM (FRICTION HOLD OPEN ARM WITH PA BRACKET)

FAL SC81A FC CLOSER HWPA DKBRZ (FRICTION HOLD OPEN ARM WITH PA

## FINISH CHART



US3 **Bright Brass BHMA 605** 



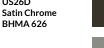
US19 Matte Black **BHMA 622** 



US5 **Antique Brass BHMA 609** 



US26D



US10B Oil Rubbed Bronze **BHMA 613** 



US32D Stainless Steel **BHMA 630** 

1154 Satin Brass **BHMA 606**  **US26 Bright Chrome BHMA 625** 



US10 Satin Bronze BHMA 612



11532 **Bright Stainless Steel BHMA 629** 



**US15** 

Satin Nickel



#### LCN 1460 CLOSER

The LCN 1460 series is a nonhanded surface mounted closer. A wide choice of options, mounting accessories and ease of installation offer maximum versatility. The LCN 1460 series has been designed to be used on metal or timber swinging commercial interior/exterior doors and is ideally suited for hospitals, nursing homes, hostels, shopping centres, commercial buildings, hotels, educational and institutional applications. LCN 1460T series is a non-handed. slim line track arm, surface mounted closer.

The LCN 1460T series has been designed to be used on metal or timber swinging commercial interior doors and is ideally suited for Apartment/Hotel/Motel doors or where aesthetics and durability are of importance.

When set to size 1 strength this closer complies with AS1428.1 of the Australian Standards (design for access and mobility). 30 year warranty

LCN 1461 CLOSER RW/PA FC 689



#### LCN 4040XP Series Closer

The 4040XP Series is LCN's most durable surface-mounted heavyduty closer, designed for the most demanding high-use-and-abuse applications. It meets ANSI/BHMA A156.4 Grade 1 standards and ADA reduced opening force requirements. This closer is c UL listed and UI listed for self-closing doors without hold open and boasts a 30-year limited warranty. The 4040XP Series features include standard non-handed plastic cover, with optional plated finish available for cover, arm and fasteners. Materials include highstrength cast-iron cylinder, forged steel arm, double heat-treated steel pinion and full complement, low friction bearing for rugged reliability in high-traffic installations.

LCN peel-n-stick templates assure quick and accurate installation, and the patented LCN Green Dial takes the guesswork out of spring force

LCN 4040XP-62PA AL PARALLEL ARM SHOE

I CN 4040XP-TBWMS AL SCREW PACK.THRU BOLT, WOOD & MACH

LCN 4040XP-WMS AL SCREW PACK, WOOD & MACHINE

LCN 4040XP CLOSER RW/PA 689

LCN 4040XP CLOSER RW/PA 695

LCN 4040XP CLOSER CUSH 689

LCN 4040XP CLOSER CUSH 695



#### LCN 4040XP Series Closer

The 4040XP Series is LCN's most durable surface-mounted heavyduty closer, designed for the most demanding high-use-and-abuse applications. It meets ANSI/BHMA A156.4 Grade 1 standards and ADA reduced opening force requirements. This closer is c UL listed and UL listed for self-closing doors without hold open and boasts a 30-year limited warranty. The 4040XP Series features include standard non-handed plastic cover, with optional plated finish available for cover, arm and fasteners. Materials include highstrength cast-iron cylinder, forged steel arm, double heat-treated steel pinion and full complement, low friction bearing for rugged reliability in high-traffic installations. LCN peeln-stick templates assure quick and accurate installation and the patented LCN Green Dial takes the guesswork out of spring force adjustments.

NORTON 8500 CLOSER

standard arm applications (with

slim, full or metal covers)

LCN 4040XP-62PA AL PARALLEL **ARM SHOE** 

LCN 4040XP-TBWMS AL SCREW PACK,THRU BOLT, WOOD & MACH

LCN 4040XP-WMS AL SCREW PACK. WOOD & MACHINE

LCN 4040XP CLOSER RW/PA 689

LCN 4040XP CLOSER RW/PA 695

LCN 4040XP CLOSER CUSH 689 LCN 4040XP CLOSER CUSH 695

LCN 4040XP CLOSER S-CUSH 689

LCN 4040XP CLOSER SH-CUSH 689

LCN 4040XP CLOSER SH-CUSH 695

### allow doors to swing 180°, conditions permitting 8301:

Features 8301/8501: Adjustable spring sizes 1-6 n8301/8501: Tristyle® packaging standard (regular arm, top jamb and parallel arm mounting) Exceeds 25 million cycles Non-handed Staked valves Standard, separate and independent, latch, sweep and backcheck intensity valves Cast aluminum body Rack and pinion design 1-1/4" (32mm) diameter piston 5/8" (16mm) diameter pinion journals 2-1/8" (54mm) COVER projection (standard covers) All

shipped with slim line plastic cover 8501: shipped with full plastic cover Optional Features Metal, architectural plastic or architectural metal covers (8500 or 8501 only) Lead lined metal cover - suffix MLL Delayed action Heavy duty arms: Regular Rigid. Parallel Rigid, CloserPlus®, CloserPlus Spring™, Unitrol® Slide tracks: push or pull side mounting

NOR 8501 CLOSER SN 689 - FULL

## NOR 8501 CLOSER SN 690

### **CLOSERS**



#### SARGENT 1431 CLOSER

Featuring heavy-duty construction superior strength and wear resistance, the 1431 Series Powerglide® Door Closer is ideally suited for highly trafficked environments like schools.

healthcare facilities, and office and commercial buildings. With a full complement of arm types and front-facing valves, the 1431 series can be easily installed and maintained-for interior and exterior applications.

#### BENEFITS

Operates effectively in extreme heat and cold without readjustment\ Meets ADA requirements in all applications except push-side track applications Versatile mounting permits standard, top jamb, parallel and track installations

SAR 1431 RUO CLOSER ER

SAR 1431 RUO CLOSER EN

SAR 1431-UO CLOSER EN

#### **SARGENT 281 CLOSER**

Designed to meet the needs of facilities maintaining "cast iron" specifications, the 281 Series Powerglide® Cast Iron Door Closer features a heavy-duty onepiece cast iron body for superior strength and wear resistance. With a full complement of arm types and front facing valves, the 281 series can be easily installed and maintained-for interior and exterior applications.

#### BENEFITS

Operates effectively in extreme heat and cold without readjustment Meets ADA requirements in all applications except push-side track applications Versatile mounting permits standard, top jamb, parallel and track installations

SAR 281 UO CLOSER EN

SAR 281-UH CLOSER EN



#### **SARGENT 351 CLOSER**

Featuring heavy-duty construction for superior strength and wear resistance, the 351 Series Powerglide® Door Closer is ideally suited for highly trafficked environments like schools, healthcare facilities, and office and commercial buildings. With a full complement of arm types and front-facing valves, the 351 series can be easily installed and maintained-for interior and exterior applications.

#### BENEFITS

Operates effectively in extreme heat and cold without readjustment Meets ADA requirements in all applications except push-side track applications Versatile mounting permits standard, top jamb, parallel and track

SAR 351 UO CLOSER EN (689/US28)

SAR 351 UH CLOSER EN



Designed to meet ADA requirements in push/pull track applications, the 422 Cam Action Closer ensures that a door is light to open, but still has enough internal force to close securely even in abusive, hightraffic environments like nursing homes, healthcare facilities, schools, and office buildings.

**BENEFITS** Operates effectively in extreme heat and cold without readjustment Heavy-duty

construction protects

door and frame from damage Square spindle provides simple, foolproof arm installation

SAR 422 PCTB2 CLOSER EN LH TB CAM

ACTION CLOSER, PUSH SIDE, NON HOLD OPEN, ALUMINUM ENAMEL, LEFT HANDED w/ THRU BOLTS

SAR 422 PCTB2 CLOSER EN RH TB

ACTION CLOSER, PUSH SIDE, NON HOLD OPEN, ALUMINUM ENAMEL. RIGHT HANDED w/ THRU BOLTS

### **FINISH CHART**



**US19** Matte Black **BHMA 622** 

> **Bright Chrome** BHMA 625

US10B Oil Rubbed Bronze

Satin Bronze

**BHMA 612** 

**BHMA 613** 

**US15** Satin Nickel **BHMA 619** 

US10

**Bright Stainless Steel** 



US32D Stainless Steel **BHMA 630** 

**US32 BHMA 629** 



#### STANLEY ODC100 CLOSER

STANLEY Commercial Hardware QDC100 Ultimate durability, With cast iron body construction, cold-forged pinion shaft, and forged steel arms, the QDC 100 stands up to heavy use over the long term. Easy to retrofit. There's no need to re-prep your door. The QDC100 has the same footprint, bolt pattern, and rounded cover as the LCN4040 so it's a simple offand-on exchange. Industry-leading warranty. Each QDC100 closer comes with a lifetime mechanical warranty and a three-year warranty on finish. Exceeds certification standards. The QDC100 is BHMA/ANSI Grade 1 certified and significantly exceeds performance requirements. These closers are fully adjustable, with a barrier free

option to meet ADA requirements.

Outstanding versatility. We

design, to make it easy to

applications.

engineered the QDC100 series

with all-weather fluid, a variety

of arm types and stop options, and

non-handed and universal mount

stock and use in a wide variety of

Premium performance standard. Get premium performance options like delayed action and a back-check valve standard with the QDC100 series. Proactive solutions. Innovative construction features like stacked valves prevent oil leaks from screws being accidentally backed out too far. Short lead time. QDC100 closers are available for immediate shipment

STA QDC111 R 689 CLOSER - Grade 1 Extra Duty Tri-Pack Arm

STA QDC111 R 690 CLOSER - Grade 1, Extra Duty, Tri-Pack Arm

STA QDC115 R 689 CLOSER - Grade 1 Extra Duty Arm

STA QDC115 R 690 CLOSER - Grade 1 Extra Duty Arm

STA QDC119 R 689 CLOSER - Grade 1

Extra Duty Arm with Spring Stop

STA QDC119 R 690 CLOSER - Grade 1 Extra Duty Arm with Spring Stop



#### STANLEY QDC200 CLOSER

STANLEY Commercial Hardware QDC200 Slim, but heavy duty. Constructed with cast aluminum, the QDC200 series combines a slim design with exceptional durability, making it a great choice for high-traffic, full glass doors. Easy to retrofit There's no need to re-prep your door. The QDC200 has the same footprint as the Norton 8000 series, so it's a simple offand-on exchange. Industry-leading warranty. Each QDC200 closer comes with a lifetime mechanical warranty and a three-year warranty on finish. Exceeds certification standards. The QDC200 is BHMA/ANSI Grade 1 certified, and significantly exceeds performance requirements. Outstanding versatility.

We engineered the QDC200 series to be fully adjustable and usable on both interior and exterior doors. All-weather fluid, a variety of feature options, and non handed and universal mount flexibility make it easy to stock and use the QDC200 in a wide variety of applications. Premium performance standard. Get premium performance options like delayed action and a back check valve standard with the QDC200 series. Short lead time. ODC200 closers are available for immediate shipment. Designed for flexibility and easy retrofitting, the QDC200 delivers the quality and versatility you need for narrow top rail doors in high traffic applications.

STA QDC211 FC 689 CLOSER - Grade 1 Heavy Duty Tri-Pack Arm

STA QDC211 FC 690 CLOSER - Grade 1 Heavy Duty Tri-Pack Arm

### CLOSERS



#### STANLEY ODC300 CLOSER

QDC300: Standard Duty Door Closers We engineered the QDC300 Series with the same high-performance materials and construction you expect from STANLEY, but in a smaller body. The smaller, narrower footprint of the QDC300 means you can put STANLEY quality on even the narrowest top rail doors. The QDC300 Series includes many premium design components standard, without costly upcharges

And with a wide range of available options and customizable features, the QDC 300 provides flexible value without compromising quality.

STA QDC311 NC 689 CLOSER - Grade 1

STA QDC311 NC 690 CLOSER - Grade 1 Standard Duty Tri-Pack Arm, No cover



#### YALE 2700 CLOSER

Yale 2700 Series Architectural Door
Closers are ideal for commercial applications where ease of use, installation and aesthetics are required at an economical price. The 2700 Series features rugged construction, adjustments for

2700 Series features rugged construction, adjustments for backcheck, closing and latch speed, and rack and pinion operation. Features

Adjustable spring sizes 1-6

Non-handed Aluminum Tri-packed: regular, parallel or top jamb mounting Full plastic cover Hold open and heavy-duty arms available Sleeve nuts furnished standard with all models Optional fasteners: Thrubolts and grommet nuts

YAL 2701 SN 689 CLOSER - Rw/PA

YAL 2701 SN 690 CLOSER - Rw/PA

### **CLOSER/CLOSER ARM**



## FALCON SC80A PARALLEL ARM WITH BRACKET

Regular arm, SC80A-3077PA Non-handed arm with adjustable forearm assembly to accommodate a range of doors and frame reveal conditions. MoUnts hinge side, top jamb or parallel arm. PA shoe included to allow installation in a parallel arm configuration.

FAL SC81A-3077/PA 689 REGULAR ARM W/PA BRACKET

FAL SC81A-3077/PA 695 REGULAR ARM W/PA BRACKET

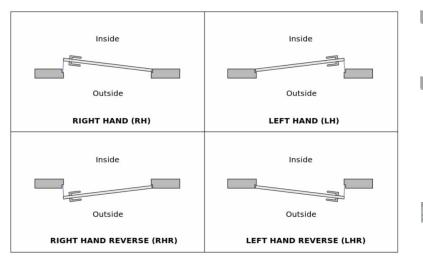
### **CLOSERS/ COVER**



### FALCON SC80A SLIM COVER

SC80A-72 Slim line plastic cover Non-handed FAL SC80A-72 689 SLIM COVER

### DOOR SWING CHART



### CLOSERS/ DROP PLATES



#### FALCON DROP PLATE

Required for top jamb mounting where head frame is less than 1 3/4" (44mm).

FAL SC60-18 DROP PLATE BRONZE -For use with Top Jamb installation where face of frame is less than 1-3/4"



## FALCON SC60A-18 PA DROP PLATES

Required for parallel arm mounting where top rail is less than 4 3/8" (111mm) for PA, 4 1/4" (108mm) for HD and DS, measured from the stop.

Plate requires 2 3/8" (60mm) minimum top rail measured from stop.

## FAL SC60-18PA DROP PLATE ALUM -

use with parallel arm mount installation when top rail of door is too narrow

FAL SC60-18PA DROP PLATE BRONZE -For use with parallel arm mount installation when top rail of door is too narrow



### FALCON SC80A DROP PLATES

Required for parallel arm mounting where top rail is less than 4 3/8" (111mm), measured from the stop. Plate requires 1 7/8" (48mm) minimum top rail measured from stop.

FAL SC80-18 DROP PLATE 689

FAL SC80-18 DROP PLATE 695

FAL SC80A-18PA DROP PLATE 695

### **CLOSERS/ DROP PLATES**



Required for parallel arm mounting where top rail is less than 4 3/8" (111mm), measured from the stop.

FAL SC80A-18PA DROP PLATE 689

Plate requires 17/8" (48mm) minimum

top rail measured from stop.

FALCON SC80A PA DROP

Required for parallel arm mounting where top rail is less than 4 3/8" (111mm), measured from the stop.

Plate requires 17/8" (48mm) minimum top rail measured from stop.

FAL SC80A-18PA DROP PLATE 689

### **CLOSERS / DROP PLATES**



## CLOSERS/MOUNTING

Base Material: Steel Size: 3 1/4" height x 13" width x 1/4" thickness Handing: Non-handed Application: Used for regular arm mounting when the top rail is too narrow to allow the closer to be mounted directly to the door surface

Finishes: AL, BZ, GLD painted finishes

Prepared Holes: Screw holes drilled & tapped for closer mounting & countersunk for installation to frame or door Fasteners : Machine, wood and self

tapping machine screws Warranty: Limited lifetime warranty

DHW 316R MOUNTING PLATE AL -RETRO FIT
PLATE w/SCREWS (Closer sold separately)

### **CLOSERS \ MULLION BRACKET**



#### DESIGN HARDWARE MULLION BRACKET

Base Material: Aluminum Dimensions: 2" x 1 1/2" x 1/4" Application: Optional accessory for use with KRM Mullions when installing on a narrow transom frame. Provides the extra surface area needed to properly install mullion.

Fasteners: Machine screws & Wood Screw Finishes: AL Painted (prime coat) Warranty: Limited Lifetime Warranty

DHW AB1 AL MULLION ANGLE BRACKET