

## Door control: Choosing the right LCN closer

Door control is not just to close the door, but also to provide enhanced security by properly latching a door that can be adjusted to meet ADA accessibility requirements. The proper door closer will control a door in both the opening and closing cycles to prevent damage and injury caused by abuse, wind or other factors.

With all of the available types and options, it can be difficult to know which closer to specify. Considerations include frequency of use, life-cycle cost and aesthetics with the necessary features and functions. Additionally, it's important to think about accessibility, fire and life safety code requirements.

### Pressure Relief Valve technology

What is the likelihood that your door opening will withstand excessive pressure? Wind and environmental conditions, abusive users or mobile equipment can often cause excessive pressure when the door is forced open or closed. If this is the case, you need to consider whether or not you want a closer that uses Pressure Relief Valve (PRV) technology. This technology features a built-in valve that relieves excessive pressure around the cylinder.

#### Considerations for choosing a closer:

- Code requirements
- Size/durability
- Grade
- Material
- Type
- Arm/function
- Spring size
- Fluid
- Fasteners
- Finish
- Mounting styles



LCN believes that one of the fundamental solutions that a door closer provides is control—door control to prevent personal injury and property damage. Door closers with built-in PRV *claim* to increase the service life in applications where the door is forced open or closed. However, PRV closer technology greatly reduces door control, and the potential effects of lost door control may result in property damage, personal injury, increased maintenance costs and liability exposure. LCN believes that these effects far outweigh the perceived benefit of increased service life. Therefore, **no LCN closers contain PRV Technology.**



**LCN closers**

Since 1876, LCN has been the undisputed innovator and leader in the door control. LCN offers a complete line of cast iron and cast aluminum door control products including heavy-duty hydraulic closers, power operators, fire/life-safety closers/holders, high-security closers and more.

LCN products feature quality components for increased security, high performance and a long service life. These features include:

- Heavy-duty forged steel arms for increased door closer stability and control.
- Double heat-treated pinions/full complement bearings to reduce wear and leaks.
- All-weather fluid to keep closer components working smoothly.
- Fast power adjust dial allows for easy adjustments and maintenance for maximum door control.
- Products that meet or exceed ANSI/BHMA minimum industry standard cycle requirement.
- Products that meet ADA requirements.
- Products that are UL Listed.

**Material**

Door closers are made of cast iron or cast aluminum. While cast aluminum closers can be an alternative solution for some facilities and applications with budget constraints, cast iron closers are preferred by many institutions because of the material's compatibility with the high-grade steel components within the closer. Where closers are subject to millions of opening and closing cycles, this durability is extremely important in high-abusive, high-traffic areas.

Cast iron closers are twice as durable as cast aluminum closers, so they are a better choice for applications and buildings that have high traffic with wear and tear on the doors and hardware. Cast iron closers are designed to last for 25-30 years or the life of the building, which provides a lower total cost of ownership and minimizes the risk of malfunctioning or broken closers at a high-traffic opening.

Historically, many specifications have listed cast aluminum closers as equal to cast iron closers. However, these products do not perform the same and are not equal in quality and durability. When writing closers in to the specification, be sure to identify the best product, cast iron or cast aluminum, to meet the performance and durability requirements of the opening.

**LCN cast iron closers**

Heavy-duty cast iron is the strongest and most reliable cylinder material available. It features, superior burst and yield strength, as well as natural graphite that self-lubricates parts, reducing wear. The robust wear eliminates internal leaks and provides minimum porosity.

The 4000 Series is LCN's most durable heavy-duty closer designed for the most demanding, high use and abuse applications. We built the 4040XP from the inside out, combining tougher, bolder construction with proven LCN technology. The result is a closer that's stronger, smarter and delivers remarkable value in a variety of applications.

**Below is a list of LCN cast iron closers:**

| Series                                   | Type                   | Application                                     | Compare to  |
|--|------------------------|---|---|
| 4040XP/<br>4040XPT                       | Surface mounted closer | High traffic                                    | Sargent 281<br>Corbin<br>Russwin 8000,<br>Norton 9500 |
| 4010/4020/<br>4110/4010T/<br>4020T/4110T | Surface mounted closer | Heavy duty, institutional, application specific | N/A   |
| 4030/4030T                               | Surface mounted closer | Interior, moderate traffic                      | Corbin Russwin DC6000                                 |
| 4000T                                    | Surface mounted closer | Interior pocket doors                           | N/A   |
| 1460/1460T                               | Surface mounted closer | Universal for light traffic                     | Corbin Russwin DC6000                                 |
| 1260                                     | Surface mounted closer | Universal, ADA                                  | Corbin Russwin DC3000                                 |
| 2210/2210DPS                             | High security closer   | Heavy duty, track closer                        | N/A   |
| 4210/4210T/<br>4510/4510T                | High security closer   | Heavy duty, anti-tampering / vandalism          | N/A   |
| 3030/3130                                | Concealed closer       | 1-3/4" interior doors                           | N/A   |
| 2010/5010                                | Concealed closer       | Institutional, high traffic                     | Sargent 200   |



**LCN cast aluminum closers**

Cast aluminum closers provide an alternative, high-quality, cost effective solution to cast iron closers. LCN cast aluminum closers feature a patented design with the most common hole-patterns in the industry. LCN cast aluminum closers do not have a pressure relief valve.

**LCN cast aluminum closer models include:**

| Series | Type                   | Application                 | Compare To   |
|--------|------------------------|-----------------------------|--|
| 4050   | Surface mounted closer | High traffic, high abuse    | Norton 7500<br>Sargent 351<br>Yale 4400<br>Dorma 8900  |
| 1450   | Surface mounted closer | Frequent traffic, low abuse | Norton 8000<br>Sargent 1430<br>Yale 3000<br>Dorma 8600 |
| 1250   | Surface mounted closer | Low traffic, low abuse      | Norton 1600<br>Sargent 1130<br>Yale 50<br>Dorma 7400   |

**Reliability, quality, service and support**

High-traffic environments are where LCN’s portfolio of heavy-duty closers is setting the standard for exceptional performance. Not surprisingly, it all begins with what goes into them: premium materials that are engineered and manufactured to obsessively tight tolerances. What’s more, LCN closers utilize several patented components and are assembled in the United States.

Learn more at [Allegion.com/us](http://Allegion.com/us) or call 877-929-4350.

**About Allegion**

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