



Appliance Storage in Motion:



Slide performance opens the door to a superior customer experience

When it comes to the daily experience of using major appliances, the quality, performance, and “feel” of the drawer slide plays a significant role in consumer perception.

Knape & Vogt has been a trusted partner to some of the largest OEMs in the industry, delivering products, engineering expertise, practical manufacturing know-how, and a “can-do” attitude that accelerates the path to success.

Our relentless focus on advancing slide features and performance prepares us to quickly fulfill the goals of your product development—and exceed your expectations.



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Refrigeration

Bottom Mount Freezer Slide

Market Need

- A sliding system that delivers superior sensorial performance, effective door closure and years of trouble free service.

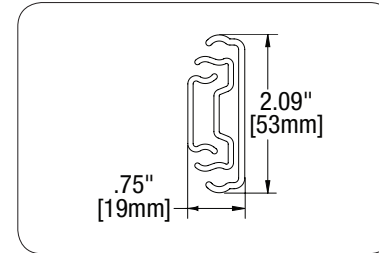
Design Challenges

- Provide leading-edge self-close technology
- Deliver low effort force to open/close drawers
- Secure closure of doors
- Full access to drawer contents
- Simple hardware attachment methods
- Support heavy weight loads
- Achieve durability performance @300,000 cycles
- Eliminate rust, corrosion due to temperature and humidity

KV Solution

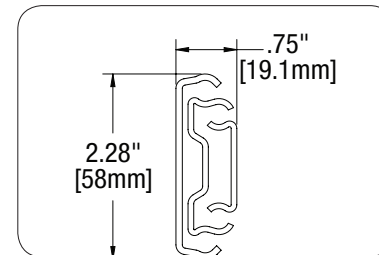
Features incorporated into bottom mount freezer slides include:

- Patented self-close mechanism with spring technology
- Appliance plating to provide corrosion resistance
- Precision roll forming & ball bearing technology
- Engineered food grade grease
- Full access to drawer content with full to over-travel slide design
- Belt-loops & bayonets for quick, secure installation
- RoHS Compliant



- 53mm (2.09") tall
- 19mm (.75") wide
- 3 member partial to over-travel extension

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- 57mm (2.24") tall
- 18.8mm (.74") wide
- 3 member partial to over-travel extension

[Download Profile](#)



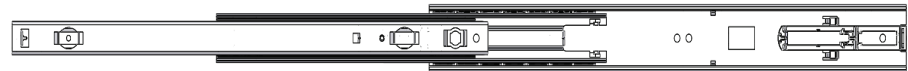
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Spotlight

Self-Close Mechanism for Bottom Mount Freezers

KV's patented self-close mechanism provides a value added option for optimizing end user experience and user convenience. The self-close feature has been designed with a long stroke closure and -40°C operating temperature with high humidity conditions in mind.



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Early stages

- Identify Trends
- Define Problem/opportunity
- Ideation
- Brainstorm project specs
- Explore existing solutions
- Share application expertise
- Refine concepts & designs

Development/Testing

- Benchmarking
- In-house prototyping
- In-house testing
- CAD integration
- Sample production/support

Tooling/Manufacturing

- U.S. & International
- Pre-tool sample support
- Project management
- Schedule-driven

Deliver and Support

- Global QA & support
- On-time / On-budget
- Responsive services
- Proven logistics and inventory support

A well-honed process keeps everything moving forward.

Working together with appliance designers and product development experts, Knap & Vogt's sliding systems engineers, testers, fabricators, and logistics personnel ensure the success of your design—from initial ideation and concepting to steady shipment of finished components and on-the-ground service anywhere in the world.

Tap us at any point in the process and we'll quickly become a responsive and effective part of your team.

Our expertise includes:

- Market Intelligence & Analysis
- Ideation
- Engineering, Modeling and Prototyping
- Project Management
- Fabrication and Manufacturing at-Scale
- Product Testing, QA, and Regulatory Validation
- Value Engineering
- Global Supply Chain Support & Service



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Optimizing your slide design characteristics

*In designing a precision ball bearing slide, there are 10 main characteristics to consider.
The Knapé & Vogt team is ready to match our products and capabilities to your requirements.*

PROFILE PLATFORM

To meet application needs
2- and 3-member solutions
www.knapelandvogt.com/slide-profiles

EXTENSION/TRAVEL

- One-way travel
- Two-way travel
- Full extension
- Less or more than full extension

EFFORT

Target effort specs needed for motion

ATTACHMENTS

Key attachment & locating features

- Threaded studs/nuts
- Brackets
- Locator/assembly assist

POSITIONING

Detent options include:

- Full forward
- Rearward
- Multiple position

LOCKING

- Lock-out-open
- Lock-in-closed
- Lock-in and out

CLOSURE

- Push-to-open
- Self-close
- Soft-close

STABILITY

- Structural enhancements include C-channel and L-channel reinforcements

SOUND

- Sound-sensitive applications
- Dampening requirements

APPEARANCE

What materials and finishes are required?

- A menu of options



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Component and application testing help support your project needs.

Knappe and Vogt has extensive in-house testing capabilities designed to ensure that our slides and appliance components consistently outperform expectations and stand ready to meet tomorrow's design challenges.

We pride ourselves on exceeding your expectations at every turn.

Our in-house testing protocols can support standard industry and customized testing needs, including:



- Life cycle
- Slam
- Out stop / rebound
- Static loader
- Dynamic loading
- Deflection curves
- Closing rates
- Corrosion



Everywhere you need us to be

Based in Grand Rapids, MI—with manufacturing in North America and Asia—Knap & Vogt exceeds the highest demands of global appliance makers, matching uncompromising quality with reliable logistics and superior customer support. Our global support network, is available to you at a moment's notice.

We welcome your inquiries

Whether you're just beginning to brainstorm a new design—or you're pressed to execute a project that's already underway, our engineers and sliding systems experts stand ready to lend a hand. Please contact us and let us know how Knap & Vogt can help you create appliance sliding systems that will set you apart.

For more information, call: 1.800.253.1561
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www.knapeandvogt.com



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