



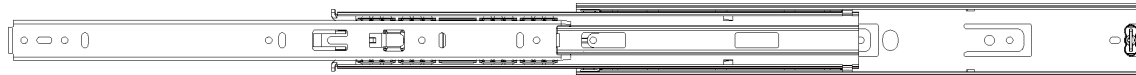
Electronic Equipment in Motion:

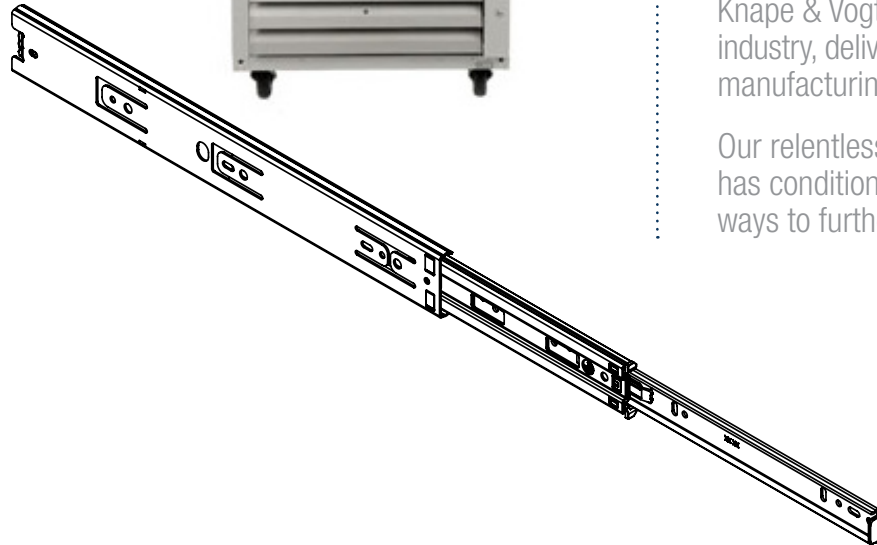
Slide into smoother performance for your products—
and your processes

More than a century of supporting the world's premiere OEMs has given us a proven track record for developing products—and partnerships—that consistently deliver more. More choices. More customization. More flexibility. More commitment to shared success.

KV pursues excellence alongside some of today's innovators, providing secure, easy access to various components and assemblies in medical dispensing carts, I.T. server racks, imaging/copy machines and ATMs.

The results: more uptime, improved service performance and greater overall satisfaction with your brand.





Performance is critical when your brand's reputation is on the line.

Keeping your products in top working order and providing service people with fast, easy access to the deep recesses of your machines are matters of utmost importance in safeguarding the value of your company's name.

If you're an engineer, designer, or procurement expert for a major manufacturer, you need to find suppliers who can match your pace, meet your cost demands and help you maintain your brand's performance integrity.

Knap & Vogt is a trusted partner to the top teams in the industry, delivering products, engineering expertise, practical manufacturing know-how and a "can-do" attitude.

Our relentless focus on advancing the "business of motion" has conditioned us to constantly look for new and better ways to further the goals of our customers.



KNAP & VOGT



A history of innovation: Advancements in mobile technology

Distinguishing your products in the competitive healthcare category is important. Sleek designs and smooth, durable operation can be achieved with the help of slides that have a strong track record—and engineering expertise to help your team innovate and improve the customer experience.

At Knapé & Vogt, we're always on the lookout for ways to refine and even re-think the way our customers use our products. We bring a well-honed VAVE perspective to every project. We have even worked to coordinate processes between OEMs and contract manufacturers to ensure the best product possible at every step of design and production.

Point-of-care carts for dispensing medication, anesthesia, diagnostic devices and more

Easy access to tools and information in clinical settings is critical for smoother patient management and for achieving better clinical outcomes. Keeping technology at hand and out of the way is an urgent concern. This calls for smart designs that incorporate heavy-duty functional hardware to keep everything moving smoothly.

Knapé & Vogt slides provide the widest array of options to accommodate optimal profiles, heights, and capacities—along with motion control features essential for heavy-use mobile applications. When safety, security and reliability are critical, our slides deliver.



- *Low-profile options maximize storage space and support streamlined designs*
- *Variety of attachment options*
- *Disconnect levers for cleaning and access advantages*
- *RoHS Compliant*



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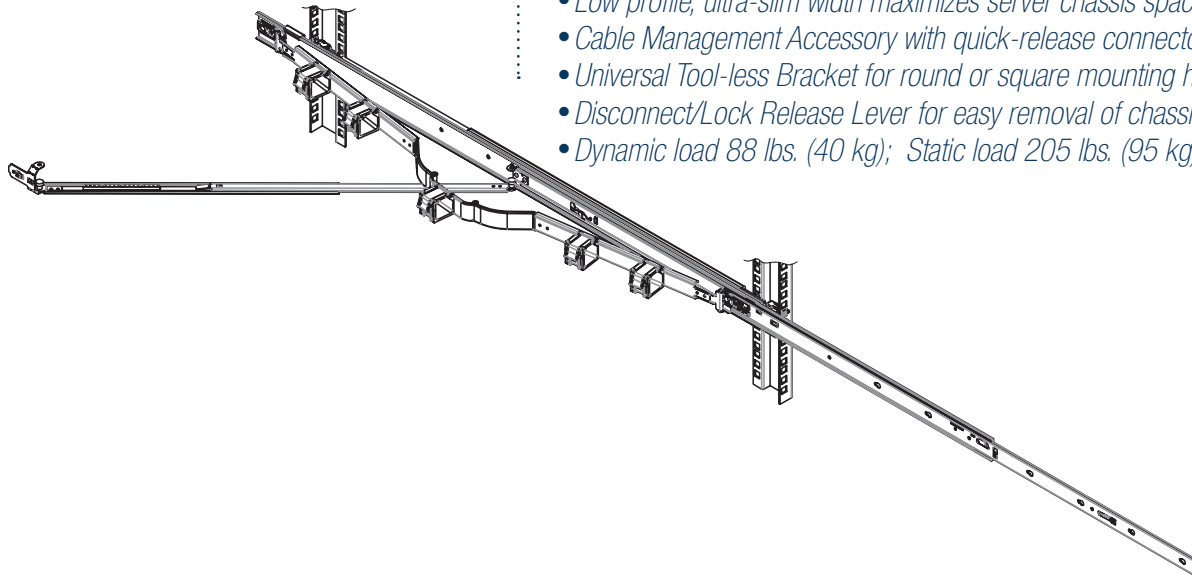


Server Racks

Smooth, easy access to data storage racks, servers and subsystems is critical for successful equipment storage as well as for maximizing uptime. KV delivers with an ultra-slim low profile, full extension slide that carries loads up to 88 lbs./40kg (dynamic) with 1" to 3" over travel available for easy access to the chassis from the front, back and sides.

We work with OEMs and contract manufacturers worldwide to create optimal designs for business that include tool-less design for quick installation and removal, built in cable management and quick access for easier servicing of valuable components.

- *Low profile, ultra-slim width maximizes server chassis space*
- *Cable Management Accessory with quick-release connector*
- *Universal Tool-less Bracket for round or square mounting holes*
- *Disconnect/Lock Release Lever for easy removal of chassis*
- *Dynamic load 88 lbs. (40 kg); Static load 205 lbs. (95 kg)*



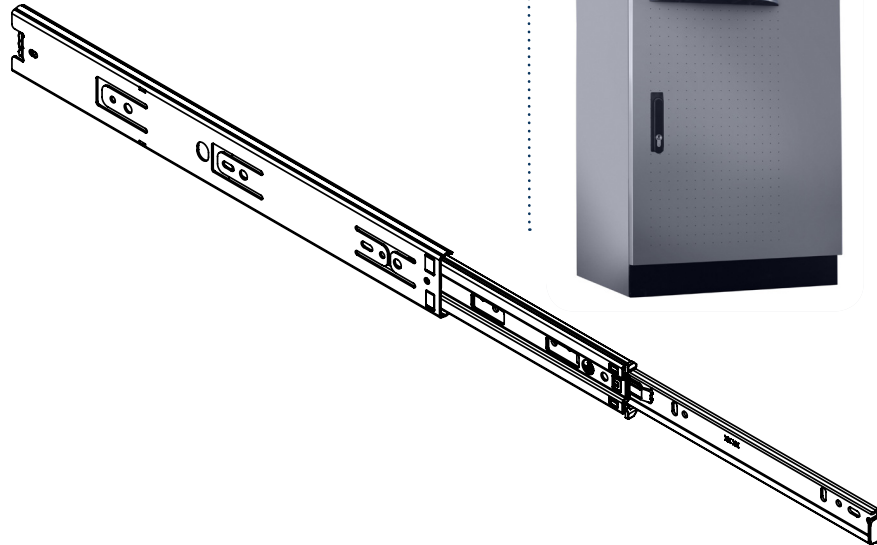


ATM machines

Ease of access for currency loading, service and routine maintenance are essential when non-technicians (e.g. bank branch personnel) are using ATMs. Knap & Vogt works with manufacturers in North and South America to optimize designs that provide a real competitive advantage and assure trouble-free operation under heavy-use conditions.



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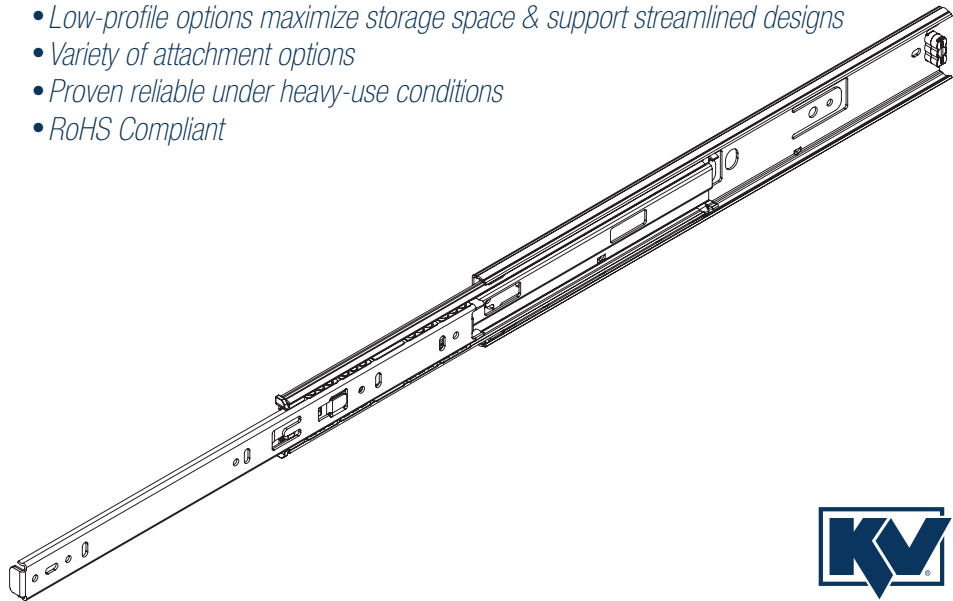


Copy machines and imaging products

Trouble-free operation over the life of a machine is an essential characteristic of the slides and functional hardware used in copy machines and imaging products.

Knap & Vogt slides answer the call for low-profile solutions in tight spaces, a range of capacities and price-points to suit OEM demands, and reliable performance to support the world's top names in the industry for paper-handling, storage and movement of critical assemblies.

- *Low-profile options maximize storage space & support streamlined designs*
- *Variety of attachment options*
- *Proven reliable under heavy-use conditions*
- *RoHS Compliant*



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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
e.g. Key DVPR criteria
- 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 manufacturers and product development experts, KV's motion engineers, testers, fabricators, and logistics personnel help ensure the success of your design, taking your idea from concept to shipment of finished components anywhere in the world.

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

Knap & Vogt expertise includes:

- 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
to put the slider in motion
and/or keep it in 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?



KNAPE & VOGT®



Everywhere you need us to be.

Based in Grand Rapids, MI—with manufacturing in North America and Asia—Knapé & Vogt exceeds the highest demands of global electronic product 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 Knapé & Vogt can help you create sliding systems that will set you apart.



KNAPÉ & VOGT®