



Telescopic slides.

Customized solutions.

**SCHÖCK**  
M E T A L L



# Engineering for telescopic slides.

For more than 40 years, Schock has been developing and manufacturing telescopic ball bearing slides in the field of linear motion technology. In definition of the specific product requirements, we create individual solutions hand-in-hand with our customers for cost-effective serial production.

The technical performance of Schock telescopic slides is based on the advantageous physical characteristics of the ball bearing slide:

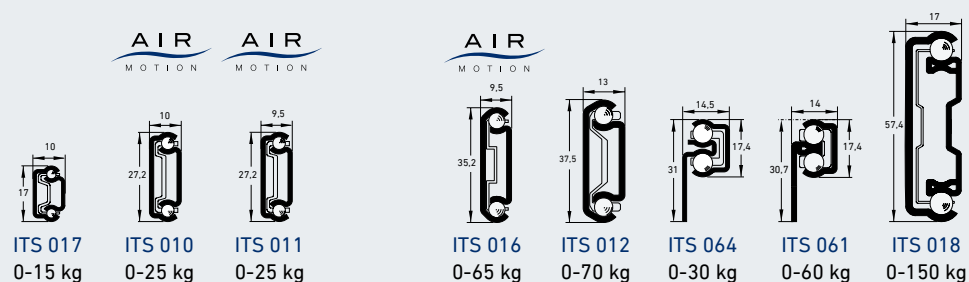
- Excellent running characteristics: Smooth and quiet movement, regardless of load size.
- High functional reliability: Forces are elastically cushioned.
- Long, maintenance-free service life: As the number of cycles increases, the ball track's self-cleaning function becomes even more effective.

In the course of the company history, Schock Metall has gathered extensive and unique expertise that offers key advantages to our customers. Schock's high-precision roll forming technology achieves extremely tight tolerances and guarantees perfect features in each and every product. Co-engineering is one of our particular strengths: Drawing from our huge selection of slide profiles, together with you we develop a sliding system that perfectly matches to your requirements.

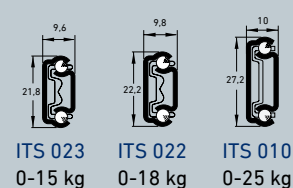
Essential options for a tailored product configuration:

- Load ratings
- Convenience features
- Fixing strategy
- Functional features
- Materials & finishes

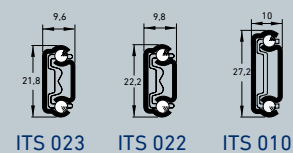
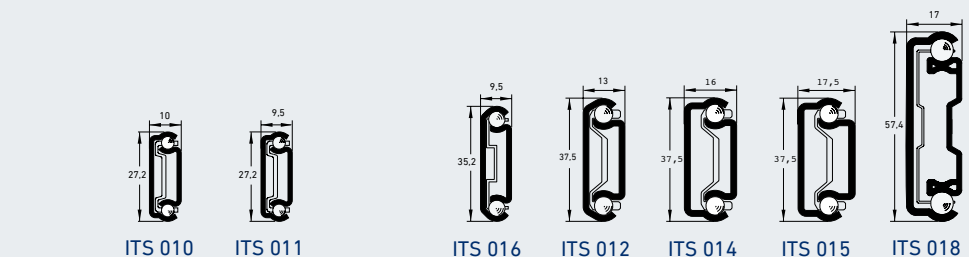
## Partial extension slides



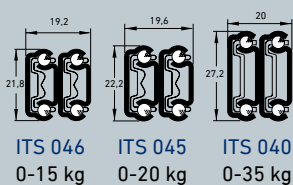
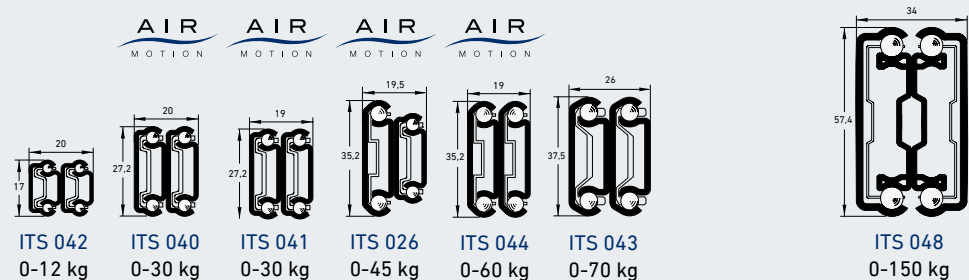
## Stainless steel



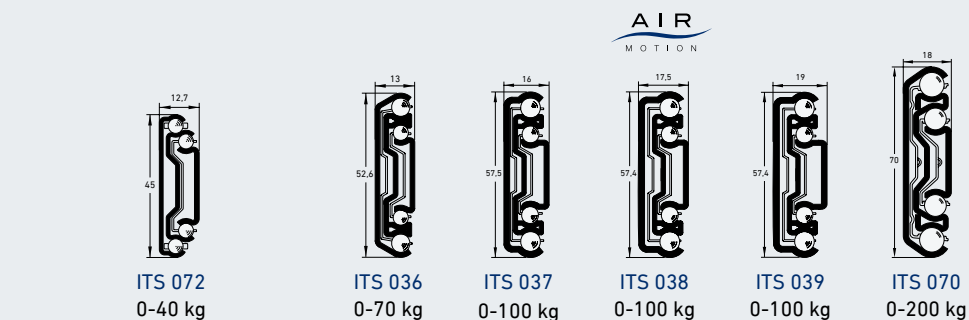
## Linear slides



## "Classic" full extension and over-extension slides



## "Compact" full extension and over-extension slides



## Profile cross-sections

CAD data (DXF):

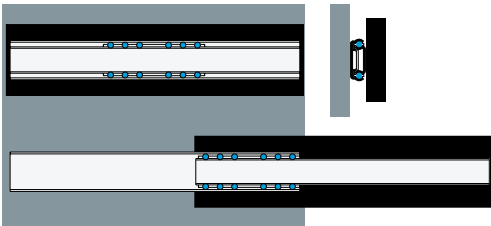




# Partial extension slides & full extension slides.

## Partial extension slide

Travel  $\leq 80\%$



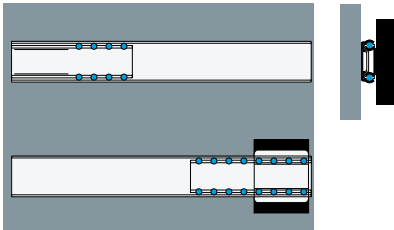
## Partial extension and linear slides

Schock partial extension slides are telescopic slides that travel up to 80% of the slide length.

Schock linear slides are specially configured partial extension slides with pre-defined travel within the slide length.

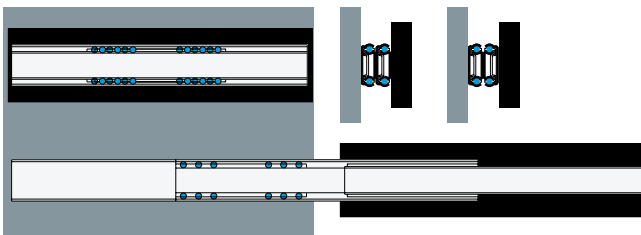
## Linear slide

Travel within the slide length



## "Classic" full extension slide

Travel approx. 80% up to  $\geq 100\%$



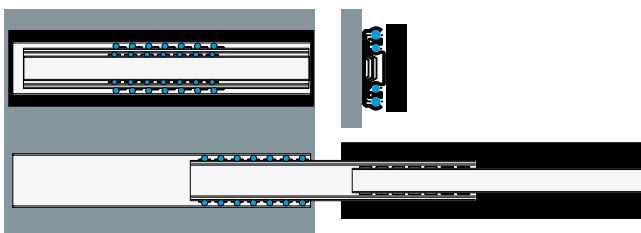
## Full extension and over-extension slides

Schock full extension slides are telescopic slides that travel from 80% to 100% of the slide length and beyond. The travel that extends beyond 100% is called over-extension.

The "Classic" full extension slide is a combination of two partial extension slides. By contrast, "Compact" full extension slides comprise three interlinking slide profiles, enabling a particularly slim and compact design.

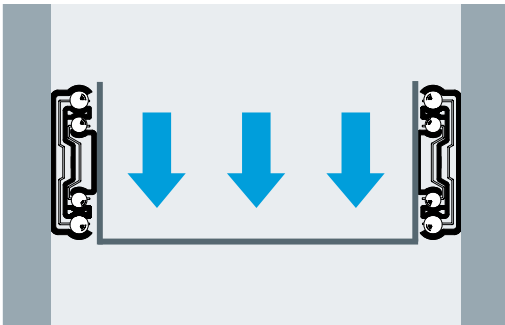
## "Compact" full extension slide

Travel approx. 80% up to  $\geq 100\%$



# High load ratings.

Schock telescopic slides demonstrate impressive load capacities coupled with small space requirements and a long service life.



Vertically mounted Schock telescopic slides achieve optimum load ratings and running properties. The ball tracks arranged one above the other ensure a high stability and durability of the slides.

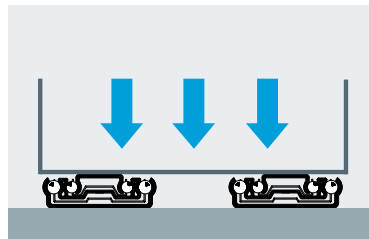
The dynamic load capacity relates to 10.000 and / or 100.000 cycles. One cycle corresponds to one opening and closing movement. The specifications are based on internal tests according to DIN EN 15338 and can be proven within the project under the required effective operating conditions.

Generally, the static and dynamic load capacity of a telescopic slide is influenced by the following factors:

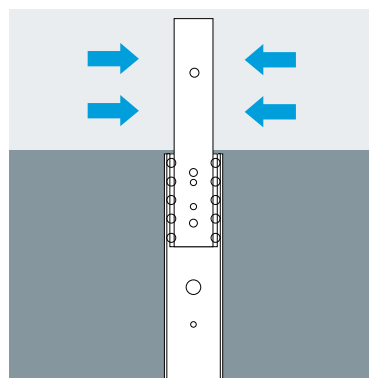
- Method of installation (vertical or horizontal)
- Slide length
- Travel
- Number of cycles
- Material
- Fixing strategy



In order to increase the load rates, several telescopic slides can be mounted one above the other and connected by means of a back-plate. This multi-pack construction is possible for many types of slides, providing an extremely high load capacity coupled with outstanding lateral stability.



Most of the Schock telescopic slides can also be mounted horizontally. However, the load capacities are significantly lower compared to vertically mounted slides.



The upright installation is possible as well, e.g. for height-adjustable systems. In those applications, the slides will support the lateral forces.





# Convenience features.

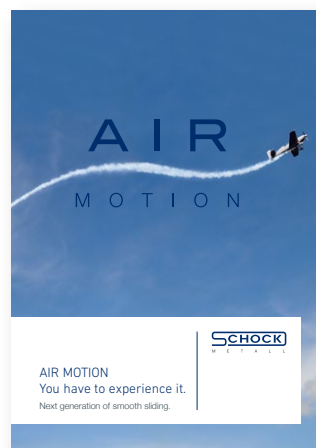
The concept of AIR MOTION stands for excellent smooth operation, comfortable feel, high resilience and long durability. The result is a perceived quality for your entire system.

The new smooth-action sliding systems made by Schock Metall utilize a completely new range of convenience features based on our proven ball bearing slide technology. With a unique combination of material and manufacturing expertise, Schock Metall has developed the fundamentals behind this new high-quality smooth operation. Decisive for the superb running quality of the AIR MOTION slides are an ingenious material mix of the ball configuration, as well as the use of special stopper systems. The overall effect is smooth, elegant motion which would otherwise only be achievable using synchronized systems.

AIR MOTION ball bearing slides are customized for your respective project according to your requirements. Added optional product features such as a powdercoated surface or integrated locking and damping systems are possible.

The benefits for you:

- Exceptionally smooth and quiet operation
- High resilience
- Comfortable feel
- Perceived quality



We'll be happy to send you our special brochure upon request.



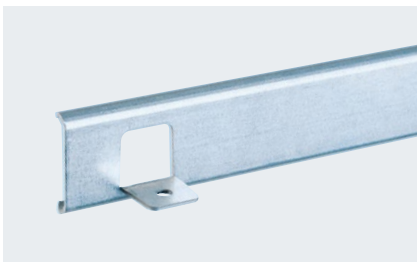
Round holes



Countersunk holes



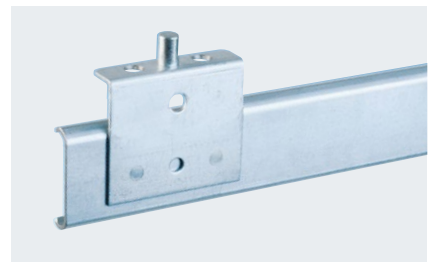
Customized holes



Bend-out tabs



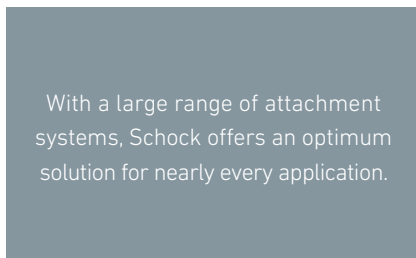
Adapted support brackets



Brackets with pin



Bayonet lancements



With a large range of attachment systems, Schock offers an optimum solution for nearly every application.



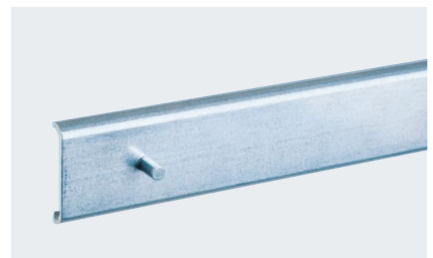
Spacer lancements



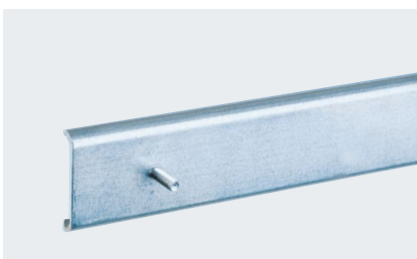
Thread piercings



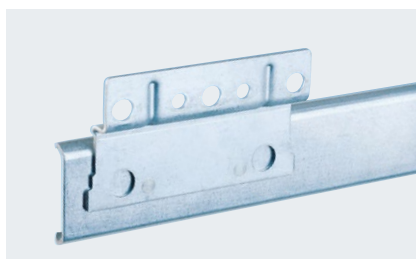
Press-nuts



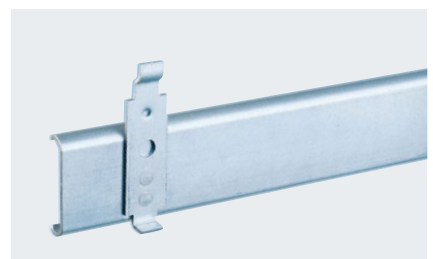
Pins



Thread bolts



Mounting brackets



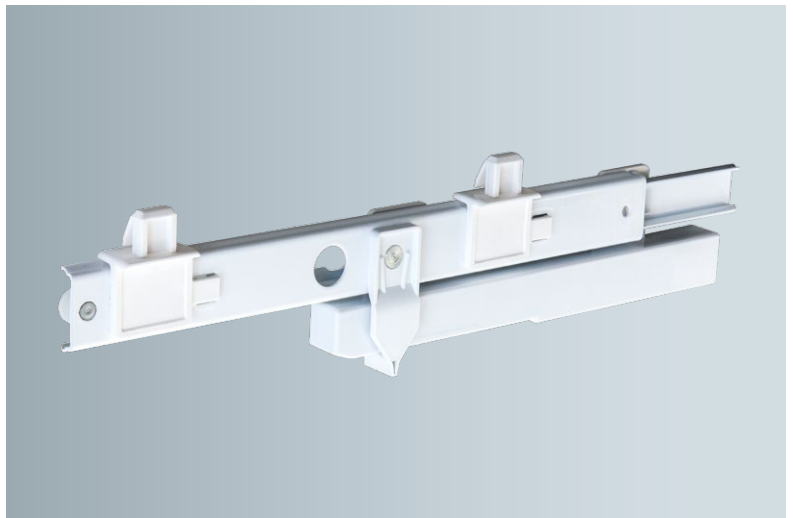
Installation hooks

# Fixing strategy.

Quick and easy assembly is a characteristic feature of Schock telescopic slides.

Schock ball bearing slides are usually pre-assembled units, ready to install. In many applications they can be connected to the fixed and moving elements by means of screws or rivets.

For cost-efficient system installation, Schock provides a wide selection of standard hole patterns, bayonet lancements, studs, bolts and mounting brackets. Furthermore, for special requirements we develop technically and economically perfectly integrated attachment systems.

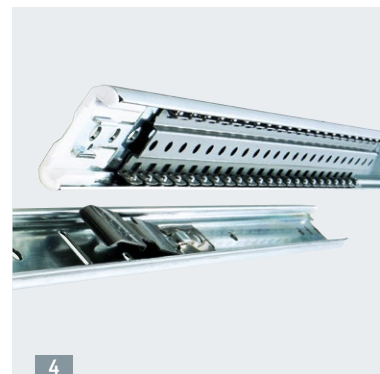
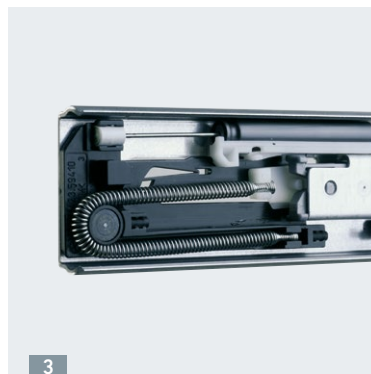
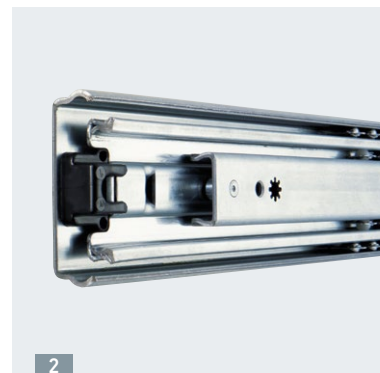


Individual solutions contribute to minimize your costs of assembly and to achieve optimum use of the existing installation space.

# Functional features.

The advantages of Schock telescopic slides are based on a large number of sophisticated details.

Proven technologies ensure perfect movement, even at challenging requirements. Stopper and detent systems can be defined according to your demands. Automatic self-closing and damping features enhance functionality and improve efficiency – individually for your application.



1. Stopper systems; Example: "Soft Stop"
2. Detent systems
3. Damping features; Example: "Soft Control"
4. Quick release systems
5. Syncro systems; Example: Parallel guidance
6. Individual solutions;  
Example: Automotive detent  
for extreme temperature ranges





# Materials & finishes.

Schock ball bearing slides are based on hot-dip galvanized steel. Some series are available in special stainless steels for particularly demanding operating conditions.

Depending on their specific application, Schock telescopic slides are finished with technically sophisticated and efficient surfaces. These include:

- **Hot-dip galvanization (standard)**  
Basic corrosion protection for applications in closed rooms.
- **"Zinc Plus"**  
Optimized zinc-based surface protection system.
- **Powder coating**  
Additional surface finish to comply with colour and decorative requirements, e.g. in the area of domestic appliances.
- **Cataphoretic painting**  
Special long-term corrosion protection, black; primarily used in the automotive sector.
- **Special finishes**

Finish	Resistance time
Zinc	up to 48 hours
"Zinc Plus"	up to 120 hours
Powder coating on zinc	up to 120 hours
Powder coating on "Zinc Plus"	up to 200 hours
Cataphoretic painting	up to 400 hours
Zinc electroplating and blue passivation (thin layer)	up to 48 hours
Zinc electroplating and black chromating / Cr(VI)-free	up to 150 hours
Zinc-iron coating and black chromating / Cr(VI)	up to 200 hours
Basis: ISO 9227 salt spray test (guidelines for red corrosion)	



**Schock Metallwerk GmbH**

Siemensstr. 1-3 • D-73660 Urbach

Tel. +49 7181 808 - 0

Fax +49 7181 808 - 299

[info@schock-metall.de](mailto:info@schock-metall.de)

[www.schock-metall.de](http://www.schock-metall.de)