

SCHOCK

TELESCOPIC SLIDES

KNOW-HOW

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“Every body continues in its state of rest, or of uniform motion in a straight line, unless compelled to change that state by forces impressed upon it.”

Isaac Newton

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OUR HISTORY OF TELESCOPIC SLIDES

SCHOCK® Metallwerk GmbH has been a renowned manufacturer of **ball bearing telescopic slides** for over 50 years, operating on a global scale. With decades of expertise, a broadly diversified product portfolio and a clear focus on the highest standards of quality and customer satisfaction, SCHOCK Metall is a leading partner in metal processing.

1971 – In Urbach, Germany, SCHOCK® establishes its metal-processing plant. From the very beginning, the company focuses on the development and production of high-precision ball-bearing telescopic slides, as well as decorative trims and ornamental metal products, which quickly become a hallmark of quality and innovation.

1978 – SCHOCK® Metallwerk GmbH is officially founded, laying the foundation for the company's development as an independent player in the metal processing industry. In the years that follow, SCHOCK establishes itself as a trusted partner for both industrial and craft applications.

2002 – SCHOCK® Metallwerk GmbH expands on a global scale and structures the company into five strategic business units: Industry, Automotive, Household Appliances, Furniture and Office. This diversification opens up new markets and strengthens the company's international competitiveness.

2020 – In Liepāja, Latvia, a state-of-the-art assembly plant is opened. All SCHOCK® telescopic slides are completed at this facility. The highest quality standards are applied, and a final quality inspection is carried out to ensure outstanding product quality.

2021 – The establishment of a logistics centre in Schopfloch, Germany, optimises global shipping coordination and ensures efficient, on-time delivery to customers on all continents. This centre represents a key pillar of the company's global logistics strategy.

2023 – The expansion of the logistics centre in Schopfloch includes an additional warehouse hall and a photovoltaic system with a capacity of 350 kW. These measures promote sustainability by reducing CO2 emissions and lowering operating costs. In addition, a modern powder-coating facility has been integrated, enhancing production quality and efficiency. These steps further strengthen the company's innovative capabilities and its commitment to environmental responsibility.



COMPANIES OF SCHOCK® GROUP



SCHOCK®

Urbach, Germany

At our headquarters, founded in Urbach in 1971, 100% of our telescopic slide profiles are manufactured. Using our in-house developed roll forming systems, profiles are produced efficiently and with a high level of precision. This manufacturing step forms the foundation of our telescopic slides. The profile components are then shipped to Liepāja, Latvia, where they are assembled, finished and prepared for dispatch at our facility before being forwarded to our logistics centre.

SCHOCK®

Hatzfeld-Reddighausen, Germany

In Hatzfeld-Reddighausen, the SCHOCK® GROUP brings together expertise, precision and innovative strength. Both standardised and customer-specific telescopic slides are developed and manufactured here. Thanks to the in-house production of tools and production equipment, SCHOCK® remains flexible and independent in the implementation of customised customer solutions. The range of capabilities is further enhanced by state-of-the-art injection moulding systems, on which technically sophisticated plastic components are manufactured directly on site.

SCHOCK®

Chesapeake, Virginia, USA

The central sales subsidiary of the SCHOCK® Group for the North American market and Canada is located in Chesapeake, Virginia. The company stands for customer-oriented service, technical expertise and fast response times, supported by its own warehousing facilities. Thanks to its direct local presence, customers benefit from short delivery routes, personalised consultation and tailored solutions for ball bearing telescopic slides.

SCHOCK®

Schopfloch, Germany

With an impressive warehousing and logistics area of over 10,000 m², Schopfloch serves as the central hub of the SCHOCK® GROUP. From here, we not only manage the global distribution of our products, but also coordinate sales and marketing activities for the entire group. Short distances, efficient processes and a dedicated team make this site the logistical control centre of our international success story.

SCHOCK®

Liepāja, Latvia

Our plant in Liepāja, Latvia, serves as the centre of expertise for the assembly and powder coating of our in-house manufactured telescopic slides and assemblies. As a full-service provider, SCHOCK® Metal Latvia manages the entire product manufacturing process, efficiently, precisely and across a wide range of industries. Customers from industrial applications, furniture manufacturing and customised solutions benefit from well-designed processes, a high level of vertical integration and uncompromising quality, "Made by SCHOCK®."

SCHOCK®

Kemalpaşa, Türkiye

Based in the industrial hub of Kemalpaşa, SCHOCK® Metal Türkiye stands for technical expertise, reliability and close customer proximity. As part of the globally successful SCHOCK® GROUP, we develop and distribute high-quality telescopic slide solutions for a wide range of applications in the household appliances and automotive sectors. Whether customised special solutions or proven standard products, SCHOCK® Metal Türkiye delivers technology that moves – for Turkey, the Middle East and beyond.

SCHOCK® TELESKOPIC SLIDES

QUALITY & SUSTAINABILITY

SCHOCK® Metall is certified in accordance with the renowned **ISO 9001 standard** and consistently implements the principles of **Total Quality Management (TQM)** across all areas of the company. This comprehensive quality approach ensures that all business processes are carefully planned, controlled and continuously optimised in order to achieve the highest levels of efficiency and product quality.

QUALITY

Through the introduction and integration of advanced control systems across all production and operational processes, it is ensured that every product meets the highest requirements. The focus is on proactive error prevention in order to achieve an almost defect-free production process. **Zero-defect manufacturing** is not merely an objective, but an integral part of everyday operations at SCHOCK Metall.

Regular customer audits represent another **key component of the quality management system**. These audits ensure transparent communication and confirm that customer requirements are consistently met. In addition, preventive quality assurance measures applied at an early stage of the production process help to identify and eliminate potential sources of error before they can affect the final product.

Through this systematic approach, SCHOCK® Metall has established a solid foundation for delivering innovative, high-quality products that meet the highest expectations – day after day. The consistent implementation of Total Quality Management and continuous improvement ensures that the company is regarded as a leader in the industry and earns trust at every level.

SUSTAINABILITY

The SCHOCK® GROUP takes its responsibility towards the environment with the highest level of priority and commitment. The companies consistently pursue a path of sustainable production and continuously work to **minimise environmental impacts**. As a clear expression of this commitment, we have maintained a comprehensive **environmental management system** for many years, covering all relevant areas of production and operational processes.

In addition, our products are distinguished by their durability and maintenance-free design. These characteristics not only extend product service life, but also reduce their **environmental footprint**. By selecting environmentally friendly materials and developing long-lasting solutions, we actively contribute to conserving resources and reducing environmental impact.

The SCHOCK® GROUP is committed to continuing to drive sustainable innovation and to acting responsibly in the future, thereby further reducing our environmental footprint and contributing to the preservation of the environment.

Photovoltaics

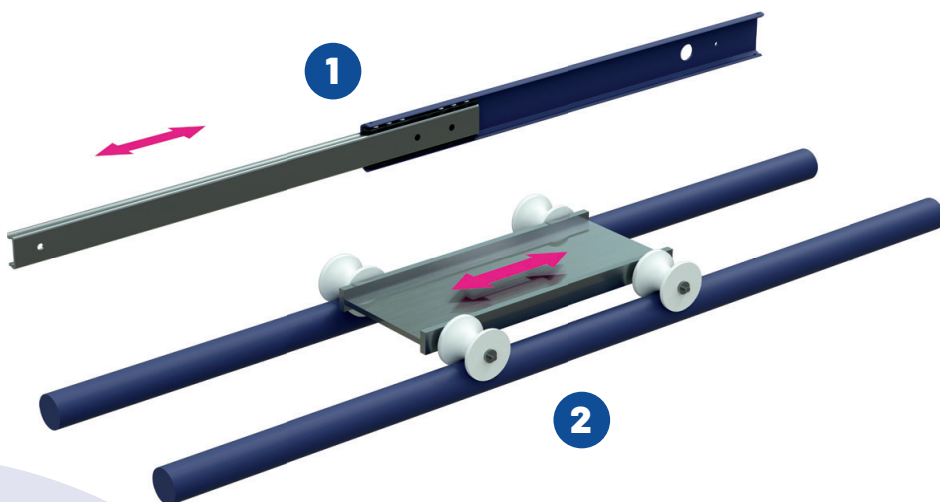
SCHOCK, Schopfloch – **340 kW**

SCHOCK, Hatzfeld-Reddighausen – **400 kW**

TELESCOPIC SLIDE VS. ROLLER GUIDE

1.) TELESCOPIC SLIDES

They are available as partial-extension or full-extension designs. In this configuration, the moving slide element travels beyond the length of the fixed slide section. This provides extended access to the extracted component, for example in drawers, pull-outs or maintenance units.



2.) ROLLER GUIDES

They have a lower load capacity and, due to their running principle, exhibit noticeable play and reduced precision. In addition, the plastic rollers used are less wear-resistant than guides made of steel sheet. Additional comfort or safety features such as soft-close, push-to-open or locking mechanisms are generally not feasible, which is why they are primarily suited for simple, lightly loaded applications.

The slide length is the maximum dimension of a fully closed slide. In principle, the maximum permissible length should be used in an application.

THE BALL BEARING TELESCOPIC SLIDE

The ball-bearing telescopic slide is a precision guidance system for linear motion. It enables the safe, smooth and controlled extension of drawers, pull-outs or components, even under high loads.

Ball-bearing guides, linear guides and telescopic slides are different terms used to describe ball-bearing extension slides, which play an important role in many applications. They enable precise movement in various directions and allow objects to be positioned easily and accurately. These sys-

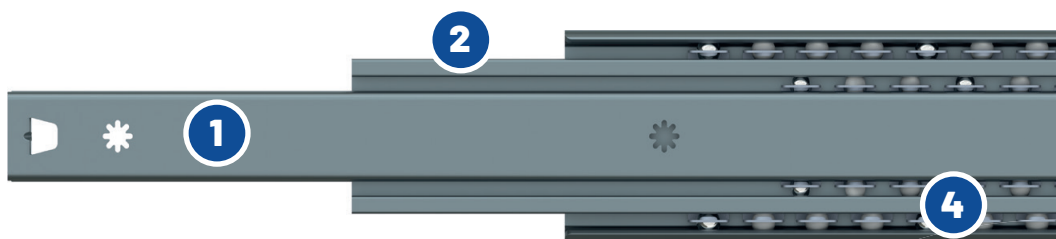
tems are particularly useful in furniture, machinery and many other fields where smooth movement and easy access are required.

1. INNER-PROFILE

Usually used for attachment to the drawer, i.e. to the moving part of the slide.

2. INTERMEDIATE-PROFILE

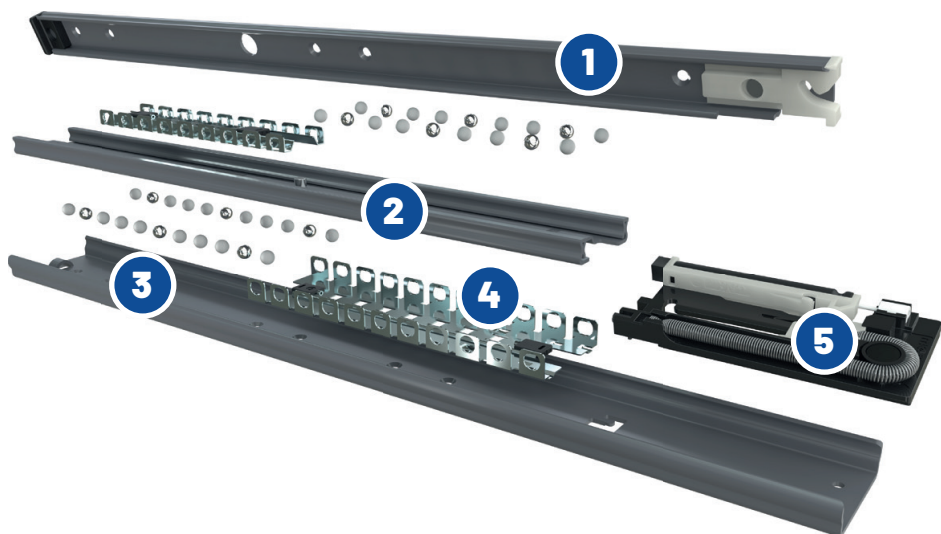
Used for even load distribution and acts as the connecting element between the inner and outer slide in full-extension or over-extension systems.



4. BALL CAGE

It keeps the balls at a constant distance from one another. In combination with our proven Air Motion® ball mix, this also ensures smooth and consistent running behaviour.

A ball cage guides the ball bearings and ensures their correct positioning. This allows controlled movement between the slide elements. Due to the high level of manufacturing precision, a movement ratio of 2:1 is achieved between the slide elements and the cage.



3. OUTER-PROFILE

Usually used for attachment to the cabinet, i.e. to the fixed part of the slide.



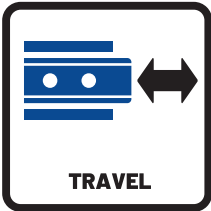
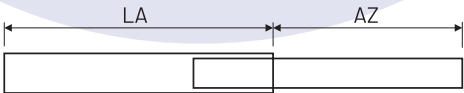
5. FUNCTION

A wide range of functional options is available in the end positions.

- Soft-close
- Push-to-open
- Hold-in
- and much more

EXTENSION VARIANTS OF TELESCOPIC SLIDES

PARTIAL EXTENSION



PARTIAL EXTENSION, EXTENDABLE ON BOTH SIDES

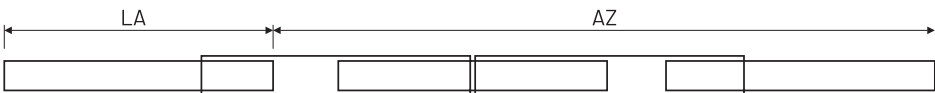


LA = Slide length
AZ = Travel path

FULL EXTENSION / OVER-EXTENSION



SUPER OVER-EXTENSION (200%)



Partial extension

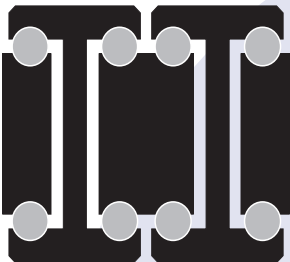
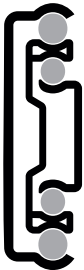
Partial-extension telescopic slides consist of two profiles: an outer slide profile and an inner slide profile.

Full extension

Full-and over-extension telescopic slides consist of three profiles: an outer, an intermediate and an inner slide profile.

Super over-extensuion 200%

The super over-extension with a travel of 200% of the slide length is machined from solid material and offers maximum load capacity and flexibility, particularly for specialised applications in mechanical engineering and plant construction.

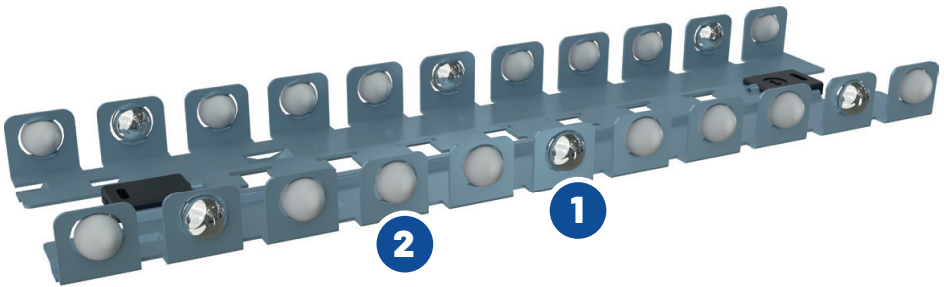


AIR MOTION® BALL MIX

GENTLE. QUIET. PRECISE.



AIR MOTION® is our new generation of low-friction slide systems, developed on the basis of proven ball-profile technology and consistently focused on comfort and quality. These slides run noticeably more smoothly while delivering high load capacity and precise operation.



1. STEEL BALLS

The hardened steel balls are utilised under maximum load conditions and therefore ensure optimum load capacity and stability of the telescopic slide.

2. PLASTIC BALLS

The plastic balls ensure smooth and quiet running of the telescopic slide. They are used under low-load conditions.

WHAT SETS AIR MOTION® APART:

- Smooth and quiet operation
- Robust design with a compact construction
- Noticeably premium running comfort
- Uniform, consistent movement

SCHOCK® TELESCOPIC SLIDES

MATERIAL QUALITY

The SCHOCK® GROUP consistently relies on high-quality materials in the manufacture of its telescopic slides, ensuring long-lasting quality, maximum load capacity and reliable performance in daily use.



The outstanding performance of SCHOCK® telescopic slides is based on the advanced physical properties of the ball bearing guide systems used, which guarantee excellent stability and smooth running.

SCHOCK® uses high-quality materials such as **galvanised steel sheet (ZM100)**, **aluminium** and **stainless steel**, which are distinguished by their strength, corrosion resistance and versatility.

So-called **hybrid telescopic slides**, combining aluminium and steel sheet, are also available.

ZINC-MAGNESIUM (ZM100) COATED STEEL SHEET IN THE STANDARD PRODUCT RANGE

Technical description:

- Coating: Zinc-magnesium (e.g. 96% Zn, 3.5% Mg, 0.5% Al)
- Coating thickness: approx. 7–8 µm per side (equivalent to 50 g/m²)
- Standard: in accordance with DIN EN 10346
- Corrosion protection class: Significantly superior to conventional galvanised steel (e.g. GI Z100)

Features:

- Excellent **corrosion protection**: Particularly at edges and cut surfaces, thanks to a passivating oxide layer
- Reduced material usage possible: Due to the improved protective performance, a thinner coating can be used
- **Long service life**: Even under aggressive environmental conditions (e.g. rural, industrial or maritime atmospheres)
- Good formability and weldability
- **More environmentally friendly**: Reduced zinc consumption, recyclable

POWDER-COATED TELESCOPIC SLIDES

SCHOCK® telescopic slides are not only functional and reliable, but also make a strong visual statement. This makes them the perfect choice for anyone who values an attractive appearance.

From as few as **250 units**, our slides are available in **nine standard RAL colours**. From **1,000 units**, **all RAL colours** are possible – individually tailored to your corporate identity or specific design requirements.

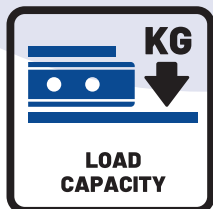
YOUR BENEFITS AT A GLANCE:

- Extremely durable: The robust powder coating provides reliable **protection against scratches, abrasion and corrosion**, making it ideal for heavily used applications.
- Our coating is durable and offers high colour quality. It is **UV-resistant** and retains its colour intensity even after many years.
- Our surface finish is flawless. The coating is always applied evenly, without runs, bubbles or imperfections. The result is a **professional, high-quality appearance**.
- Our powder coating is **solvent-free** and therefore **environmentally friendly**.
- Customised and flexible: The wide range of colours allows our telescopic slides to be tailored to your **product design**.

With our powder-coated telescopic slides, you benefit from proven quality and maximum design flexibility – in mechanical engineering, the furniture industry, medical technology or specialised applications.



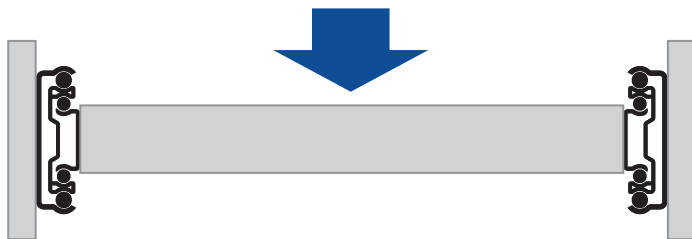
LOAD CAPACITY AND DEFLECTION OF TELESCOPIC SLIDES



Manufacturers of telescopic slides and drawer runners always specify a maximum load capacity (TK) for their products. This value defines the highest permissible weight that a pair of slides can support.

Important:

The specified load capacities are gross values. This means they include the total weight, consisting of the payload plus the weight of the drawer itself. The weight of the drawer must therefore always be taken into account in the calculation to ensure safe operation, long service life and reliable running characteristics.



The term “**cycle**” often requires further clarification. When testing telescopic slides, they are mounted together with a drawer either in a test rig or in their actual application environment. They are then opened and closed repeatedly in cycles.

ONE CYCLE = ONE COMPLETE OPENING AND CLOSING OPERATION.

Cycle testing is a dynamic load test in which not only the weight, but also movement, acceleration and deceleration are taken into account. Depending on the slide type and the intended application, different numbers of cycles are applied.

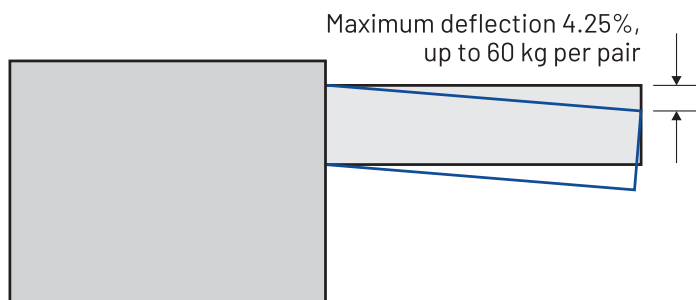
TYPICAL GUIDELINE VALUES ARE:

- Industrial and electronic applications: 10,000 cycles
- Furniture applications: 80,000 cycles

These tests ensure that the slides operate reliably, safely and with stable functionality over a long service life.

All SCHOCK® products are subjected to a static load test with the slide elements fully extended. In this test, the applied load generally corresponds to **twice the load used in the dynamic load test**. This means that, in the extended position, the slide provides a static safety factor of 100%. During the **dynamic testing phase**, the **deflection of the guide element** is continuously measured and evaluated in relation to the applied load as well as the number of completed test cycles. This approach allows the long-term behaviour of the slide under real operating conditions to be reliably assessed.

DIN standard 68858 defines the **permissible limit values for deflection** and serves as the authoritative reference for evaluating the test results.



To ensure better comparability, SCHOCK® tests all standard slides using identical test procedures. This allows **load capacity**, **service life** and **functional characteristics** of the individual slide types to be compared objectively.

It should be noted that these tests are designed for the complete system consisting of the slide and the drawer. There is no universally applicable test method for individual slides alone.

If no drawer is used in an application – as slides are also employed in many other fields of use – it is recommended that the slides be tested under real installation conditions in the specific application.

This allows actual loads, motion sequences and installation situations to be realistically assessed, ensuring a safe and long-lasting design.

All tests are carried out in our **in-house laboratories** at our global development and production sites, ensuring uniform standards and comparable results.

The telescopic slides are typically mounted with a **centre distance of 450 mm**, with the test load positioned centrally and then subjected to cyclic loading. During testing, running behaviour, deflection and functional reliability are regularly monitored.

Depending on the application, up to 80,000 cycles are tested for furniture applications and up to 10,000 cycles for industrial applications.

If only minimal deflection tolerance is permissible in your application, our machined heavy-duty telescopic slides offer the optimal solution. Thanks to their high stiffness and precise manufacturing, they ensure exceptionally stable running behaviour – even under high loads.

The maximum permissible deflection is determined on a model- and length-specific basis and can be provided on request.

LOAD CAPACITY IN RELATION TO DRAWER WIDTH

Drawer width has a significant influence on the load capacity and running behaviour of telescopic slides. As the width increases, the forces acting on the slides also rise, which can lead to uneven running, increased wear or instability if an unsuitable slide is selected.

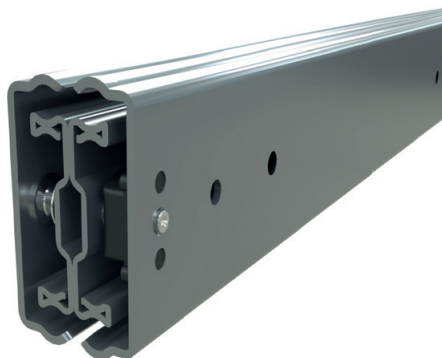
For wide drawers, we offer specially designed slide systems. These are tested and approved under realistic conditions with increased slide spacing.

SERIES 048

SCHOCK® full-extension telescopic slide, Series 048, with a **load capacity of up to 150 kg per pair**. Thanks to its specially designed profile geometry, it is ideal for **drawer widths of up to 1,500 mm and extension lengths of up to 1,200 mm**.

Its high torsional rigidity ensures smooth and consistent running behaviour.

Suitable platform brackets, see page 26.



Our products are additionally subjected to an end-stop impact test. During this test, the drawer or telescopic slide is repeatedly opened and closed until it comes into contact with the end stops. As part of this procedure, ten opening and closing cycles are performed at a speed of 1.25 to 1.85 m/s, depending on the applied load.

Depending on the area of application, different test standards may be applied. Our general test procedures are typically based on national and international standards such as BIFMA, ANSI, ISO, BS and DIN.



INSTALLATION VARIANTS OF TELESCOPIC SLIDES

To ensure optimum performance of our telescopic slides, they must be installed strictly in accordance with the specifications provided in the catalogue or technical data sheet.

To achieve the maximum rated load, all designated mounting positions must be used. The positions and dimensions of the mounting holes are clearly defined in the technical product data sheets.

During installation, it must be ensured that both slides are mounted **parallel to each other**, both **horizontally** and **vertically**, in order to guarantee smooth running behaviour and long service life. The optimum mounting height on the drawer is

between one third and two thirds of the drawer height, measured from the bottom edge of the drawer.

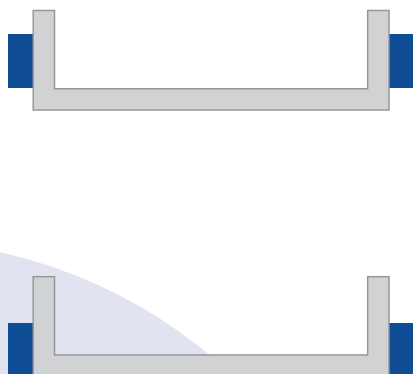
The **ideal position** is **therefore at or slightly below the centre line** of the drawer. This position provides the best compromise between stability, smooth running and load capacity.

Important:

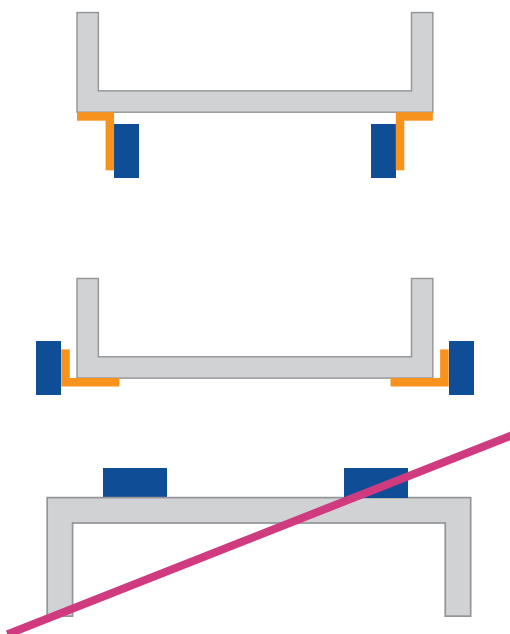
Use only mounting holes that are specified with dimensions for fastening. Holes without dimensional specifications are purely manufacturing or processing holes. Their shape and position may vary and they are not intended for installation.

RECOMMENDED INSTALLATION OF A TELESCOPIC SLIDE

Direct mounting of telescopic slides



Mounting with brackets



TELESCOPIC SLIDES – INSTALLATION AND TOLERANCES

A decisive factor for the proper functioning of the telescopic slides is that both slides are installed exactly parallel to each other.

For simple and reliable verification, particular attention must be paid to the **squareness** and **parallelism** of the components involved.

In other words, the assembly of cabinets and drawer boxes requires the highest dimensional accuracy. The more precisely the construction is executed, the smoother, more durable and more load-bearing the extension system will operate.

Practical tip:

Work with extreme precision. Even minor deviations in alignment can impair running behaviour or lead to increased wear.

Lateral Installation Space and Mounting Practice

Another decisive factor for the proper functioning of telescopic slides is the lateral installation space – that is, the clearance between the cabinet carcass and the drawer in which the slide is installed.

This lateral clearance must:

- be constant and parallel over the entire length
- and be slightly wider than the slide

be designed accordingly. Typically, the required clearance is +0.2 mm to +0.5 mm greater than the slide width.

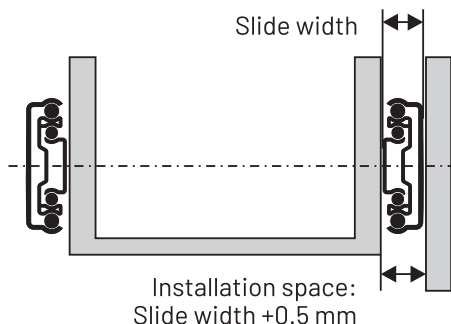
Installation Challenges:

Correct horizontal positioning of the slides can be challenging in practice, particularly:

- when installing them on the inside of fully assembled furniture
- or when working on the rear side of a cabinet

Avoid difficulties by pre-drilling the panels precisely before assembly.

As a general rule, accurate manufacturing and precise installation are the key to a successful and long-lasting installation.



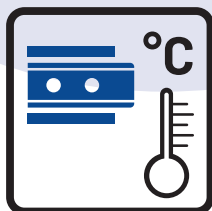
Simplified Installation through Quick Release

Telescopic slides with a quick-release function can be separated into their individual profiles.

In this case:

The outer profile is mounted separately and easily to the cabinet carcass. The inner profile can then be accurately fixed to the drawer independently. This approach significantly simplifies installation and improves fitting accuracy, particularly in complex or hard-to-access installation situations.

OPERATING TEMPERATURE RANGE OF TELESCOPIC SLIDES



The operating temperature range of our standard telescopic slides is **-20°C up to +70°C**.

When a soft-closing mechanism is used, the operating temperature range is **+10°C up to +40°C**.

(Low-temperature applications are implemented using specially developed dampers designed for this purpose.)

SCHOCK® TELESCOPIC SLIDES FOR HIGH-TEMPERATURE APPLICATIONS

Partial extension series 015

Temperature range: -20 °C to 220 °C

Lengths: 537 mm or 600 mm

Load capacity: 50 kg per pair

Machined stainless steel (1.4404) telescopic slides

Temperature range: -60 °C to 400 °C

Lengths: up to 2,500 mm

Load capacity: 600 kg per pair

Machined aluminium (EN AW 6082 T6) telescopic slides

Temperature range: -40 °C to 200 °C

Lengths: up to 2,000 mm

Load capacity: 330 kg per pair

Machined steel (C45E+C) telescopic slides, individually zinc-plated

Temperature range: -20 °C to 250 °C

Lengths: up to 3,000 mm

Load capacity: 2,500 kg per pair

FUNCTIONS AND OPTIONS

SCHOCK® TELESCOPIC SLIDES

SCHOCK® telescopic slides offer far more than simple linear movement: they are versatile, durable, low-maintenance and available from stock. Intelligent additional features such as damping, locking or push-to-open mechanisms provide high levels of comfort and safety, ensuring precise and reliable motion in every application.



The integrated **Soft-stop** ensures that the slide is gently and controllably decelerated in the closed end position. This prevents hard impacts, reduces noise and protects the mechanism. The result is smooth, comfortable operation and an extended service life of both the telescopic slide and the overall application.



The **Hold-in** in the slide in the closed position with a precisely defined holding force. This ensures the extension remains safely closed, prevents unintentional opening caused by vibration or inclination, and guarantees reliable, controlled positioning during everyday use.



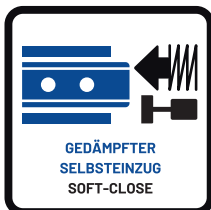
With the **Push-to-open** function, the slide opens automatically with a light finger press. The integrated push-to-open mechanism reliably releases the extension and moves it forward independently, making it ideal for handle-less applications and a comfortable, modern operating concept.



Locks the slide securely in the closed position. The integrated **locking mechanism** prevents unintentional opening and ensures maximum operational safety. To open, the lock is simply released via a latch, allowing the slide to disengage in a controlled and reliable manner.



The **self-closing mechanism** automatically and smoothly pulls the slide into the closed end position. It supports comfortable operation, ensures clean and complete closing, and at the same time reduces noise and mechanical stress.



The comfortable **Soft-close mechanism** automatically pulls the slide into the closed end position gently and almost silently. The integrated damping prevents hard impacts, increases user comfort, and protects both the mechanism and the application – ensuring a high-quality, long-lasting closing action.



The **Hold-out mechanism** reliably secures the slide in the open position with a defined holding force. It prevents unintentional retraction of the extension and ensures secure support and comfortable operation, even under inclination, vibration, or varying loads.



The **Lock-out** in the open position securely retains the slide. It prevents unintentional closing and ensures maximum stability in the extended state. The lock can be deliberately and reliably released by operating a latch.



The **Disconnect mechanism** allows the inner slide member to be released quickly and easily by operating a latch. This enables drawers or extensions to be conveniently installed, removed, or serviced without having to dismantle the entire slide assembly.

RECOMMENDED FIXING SCREWS*

The installation of the drawer or the moving slide member should ideally be carried out with assistance. Before installation, it is recommended to accurately mark the fixing points and, where possible, pre-drill them to ensure clean, stress-free assembly.

To access all fixing points, the slide must be fully extended. Depending on the design, certain fixing points may only be accessible through dedicated openings in the slide profile. The slide is then secured using the specified fixing screws.

After installation, smooth and correct operation should be checked by repeatedly opening and closing the drawer fully. In most cases, restricted or stiff movement can be attributed to the following causes:

- **Design-related characteristics of the cabinet or drawer**
- **Installation errors or inaccuracies in the mounting of the slides**

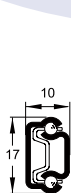
Series	Recommended screws*	Suitable brackets
017 series	4 mm countersunk wood screw, M4 countersunk screw	-
010 series	4 mm countersunk wood screw, M4 countersunk screw	21000000110
040 series	4 mm countersunk wood screw, M4 countersunk screw	-
016 series	4 mm countersunk wood screw, M4 countersunk screw	21000000210
012 series	M4 countersunk screw / 6 mm Euro screw / 4 mm wood screw	21000000310-350
072 series	M4 countersunk screw / 6 mm Euro screw / 4 mm wood screw	21000000310-350
044 series	M4 countersunk screw	21000000210
036 series	4 mm countersunk wood screw, M4 countersunk screw	21000000110
037 series	5 mm countersunk wood screw, M5 countersunk screw	21000000110
038 series	4 mm countersunk wood screw, M4 countersunk screw	21000000110
039 series	4 mm countersunk wood screw, M4 countersunk screw	21000000110
048 series	M5 countersunk screw	-
070 series	M5 / M6 countersunk screw	21000000410-440
076 series	M5 / M6 countersunk screw	-

All countersunk head screws (90°) with metric thread – ISO 10642 (DIN 7991)

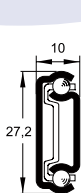
*) Recommended screws must be checked by the customer for strength and quality.

PROFILE CROSS-SECTIONS SCHOCK® TELESCOPIC SLIDES

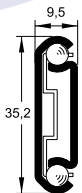
PARTIAL EXTENSION CONSISTING OF 2 PROFILES



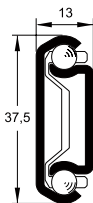
Profil 017
0-15 kg



Profil 010
0-20 kg

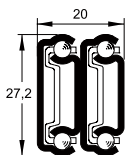


Profil 016
0-50 kg

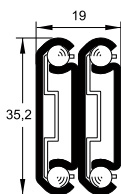


Profil 012
0-50 kg

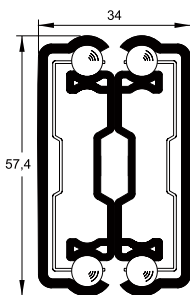
FULL- /OVER-EXTENSION CONSISTING OF AT LEAST 3 PROFILES



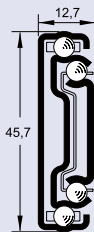
Profil 040
0-30 kg



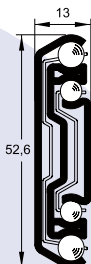
Profil 044
0-75 kg



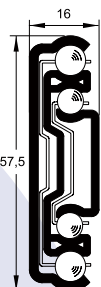
Profil 048
0-150 kg



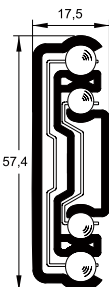
Profil 072
0-50 kg



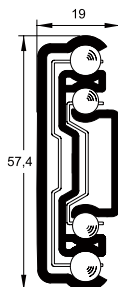
Profil 036
0-75 kg



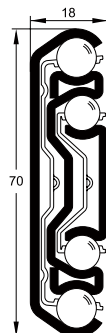
Profil 037
0-100 kg



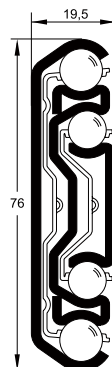
Profil 038
0-100 kg



Profil 039
0-125 kg



Profil 070
0-160 kg



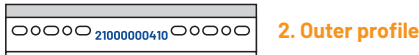
Profil 076
0-230 kg

PLATFORM BRACKETS FOR HEAVY-DUTY SERIES 2070

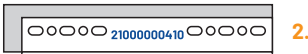
Slide length Item No. mm	Bracket 305 mm 21000000410		Bracket 406 mm 21000000420		Bracket 559 mm 21000000430		Bracket 711 mm 21000000440	
	A	B	A	B	A	B	A	B
305	1	2	-	-	-	-	-	-
356	1	2	-	-	-	-	-	-
406	-	-	1	2	-	-	-	-
457	-	-	1	2	-	-	-	-
508	-	-	1	2	-	-	-	-
559	-	-	-	-	1	2	-	-
610	-	-	-	-	1	2	-	-
660	-	-	-	-	1	2	-	-
711	-	-	-	-	-	-	1	2
762	-	-	-	-	-	-	1	2
813	-	-	-	-	-	-	1	2
864	-	2	-	-	-	-	1	1
914	1	3	1	1	-	-	-	-

In the following sketches, the first illustration after the respective length specification refers to the inner profile (1), and the second illustration refers to the outer profile (2).

Slide length = 305 mm



Slide length = 356 mm



Slide length = 406 mm



Slide length = 457 mm



Slide length = 508 mm

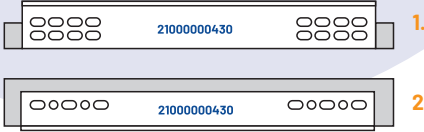


Slide length = 559 mm



INSTALLATION EXAMPLES FOR PLATFORM MOUNTING

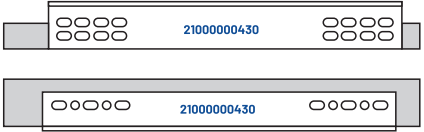
Slide length = 610 mm



1.

2.

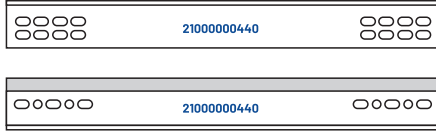
Slide length = 660 mm



1.

2.

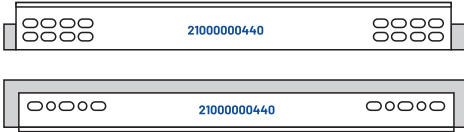
Slide length = 711 mm



1.

2.

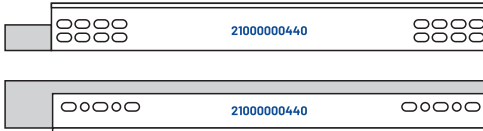
Slide length = 762 mm



1.

2.

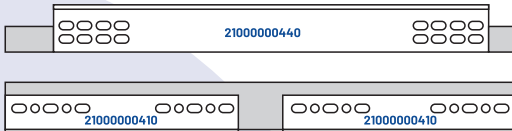
Slide length = 813 mm



1.

2.

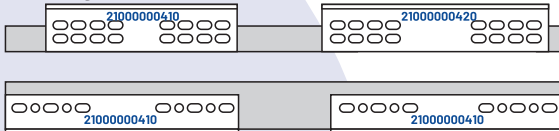
Slide length = 864 mm



1.

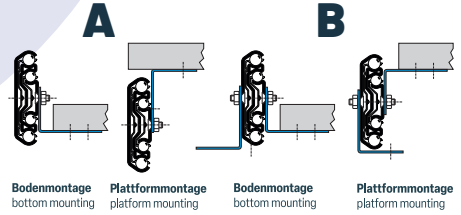
2.

Slide length = 914 mm



1.

2.



Bodenmontage
bottom mounting

Plattformmontage
platform mounting

Bodenmontage
bottom mounting

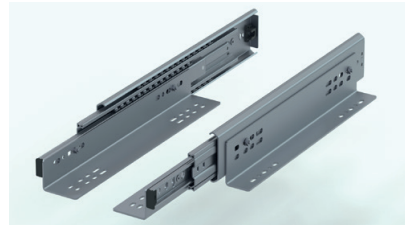
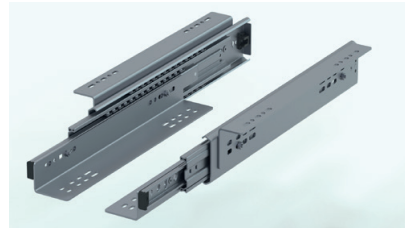
Plattformmontage
platform mounting

Notes

A = Installation on the inner slide
B = Installation of free-standing slides

Included in the bracket set

1 × bracket, 2 × M6 countersunk screws,
2 × M6 nuts, 2 × lock washers



PLATFORM BRACKETS FOR HEAVY-DUTY SERIES 2048

Required Brackets according to slide length

Slide length Item No.	Bracket 305 mm 21000000410		Bracket 406 mm 21000000420		Bracket 559 mm 21000000430	
mm	A	B	A	B	A	B
800	2	4	-	-	-	-
900	-	-	2	4	-	-
1000	-	-	2	4	-	-
1100	1	2	-	-	1	2
1200	-	-	1	2	1	2

Included in the bracket set:
 1 × angle bracket, 2 × countersunk screws
 M5, 2 × M5 nuts, 2 × lock washers

Slide length = 800 mm



Schienenlänge = 900 mm



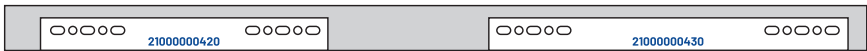
Slide length = 1000 mm



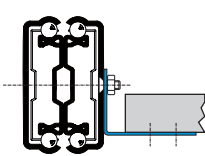
Slide length = 1100 mm



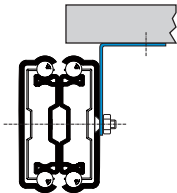
Slide length = 1200 mm



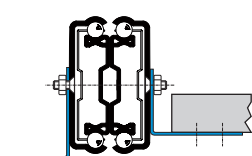
INSTALLATION EXAMPLES FOR PLATFORM MOUNTING



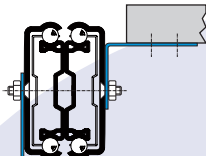
Bodenmontage
bottom mounting



Plattformmontage
platform mounting



Bodenmontage
bottom mounting



Plattformmontage
platform mounting

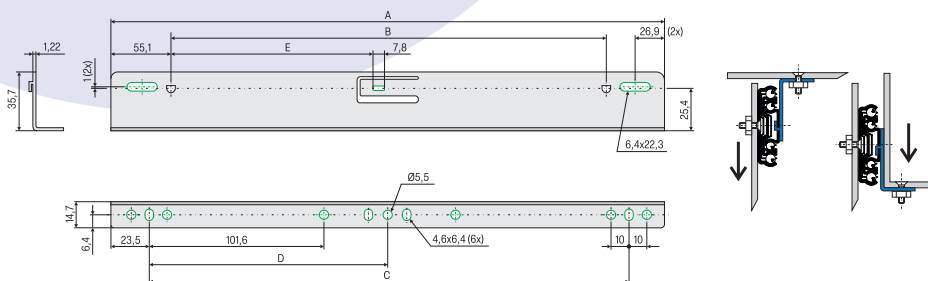
Notes:

A = mounting on the inner slide, B = mounting on free-standing slides

All countersunk screws (90°) with metric thread – ISO 10642 (DIN 7991)

*) Recommended screws must be checked by the customer for strength and quality.

CLIP-ON BRACKETS FOR SERIES 2012 & 2072



Clip-on Bracket

Item-No.: 21000000310/-350

Suitable for telescopic slides

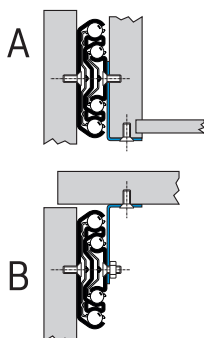
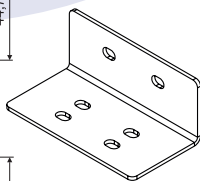
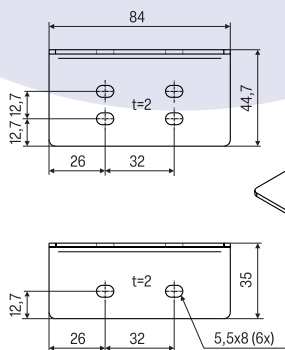
Series 072 (not suitable for models with self-closing and push-to-open)

Series 012

Item-No.	Slide length	A	B	C	D	E	Weight
	mm	mm	mm	mm	mm	mm	kg per piece
21000000310	350	346,7	236,5	300	150	117,4	0,16
21000000320	400	396,7	286,6	350	175	139,4	0,18
21000000330	450	446,8	336,6	400	200	164,4	0,20
21000000340	500	496,8	386,6	450	225	189,4	0,22
21000000350	550-700	546,8	436,6	500	250	214,4	0,25



UNIVERSAL BRACKETS FOR SERIES 2010, 2036/..37/..38/..39



Universal bracket 32 Item-No.: 21000000110

Suitable for telescopic slides

Series 010

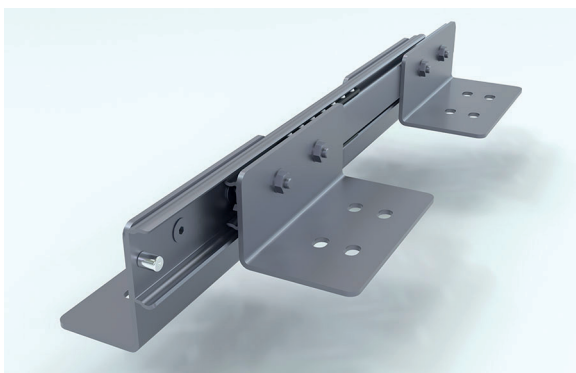
Series 036 (with Sels-close)

Series 037

Series 038

Series 039 (with Sels-close)

For floor (A) and platform mounting (B). At least 2 brackets per slide are required (depending on slide length). Small parts are supplied by the customer.

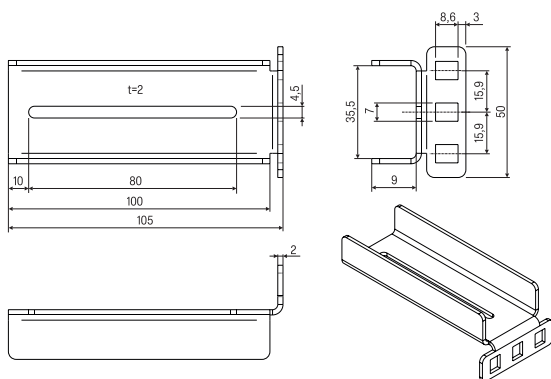


ENCLOSURE MOUNTING BRACKETS FOR SERIES 2016, 2044 & 2039

Optional brackets are available to facilitate the installation of slides in electronic racks or enclosures.

Two brackets are required per telescopic slide.

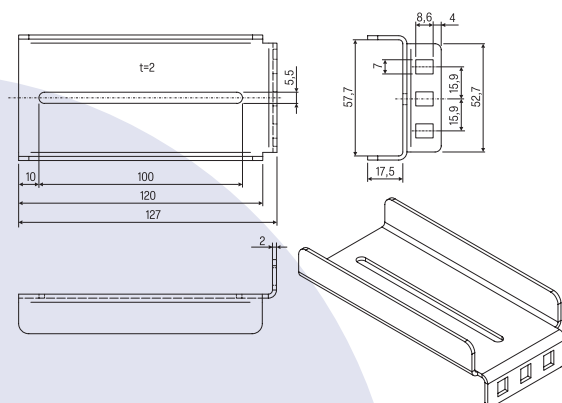
Small parts are supplied by the customer.



Enclosure mounting bracket 35
Item-No.: 21000000210

Suitable for telescopic slides

Series 2016 und 2044



Enclosure mounting bracket 57
Item-No.: 21000000220

Suitable for telescopic slides

Series 2039



TROUBLESHOOTING: BALL CAGE DISPLACEMENT

With increasing service life, the drawers can no longer be fully extended.

THIS ISSUE OCCURS IN PARTICULAR WHEN THE DRAWER IS REGULARLY OPENED ONLY PARTIALLY AND NOT MOVED TO FULL EXTENSION.

SOLUTION:

Pull the drawer fully open using increased force. This returns the ball cages to their correct position, after which the drawer will operate smoothly again.

If this practice continues over a longer period, the **ball cages inside the slide may shift**. As they are part of the braking and guiding system, their altered position can result in the drawer no longer being correctly stopped during opening.

Typically, this becomes apparent when the **slide blocks shortly before reaching the end position**. In some cases it can neither be fully opened nor fully closed; however, in most cases, only full extension is affected.

If the slide is in an incorrect position, it can often only be fully opened or closed again by **applying increased force**, for example, by **pulling firmly** or **pushing it closed with momentum**. This overcomes the increased rolling resistance of the balls and returns the slide to the correct position.

This behaviour is referred to as “migration of the rolling elements” and generally occurs with all ball bearing slides, regardless of the manufacturer.



CLEANING AND MAINTENANCE OF TELESCOPIC SLIDES

Under normal conditions, drawer slides can be opened and closed effortlessly. However, if dirt enters the raceways, this can impede movement and cause the slide to no longer run smoothly.

SCHOCK® telescopic slides are equipped with self-cleaning ball cages that protect the raceways by picking up and removing foreign particles between the balls. Nevertheless, in individual cases, dirt may still become lodged in the ball tracks.

Not every drawer slide can be easily removed from its application. Depending on the manufacturer and product, removal procedures may vary. Therefore, the respective manufacturer's installation or assembly instructions should always be observed.

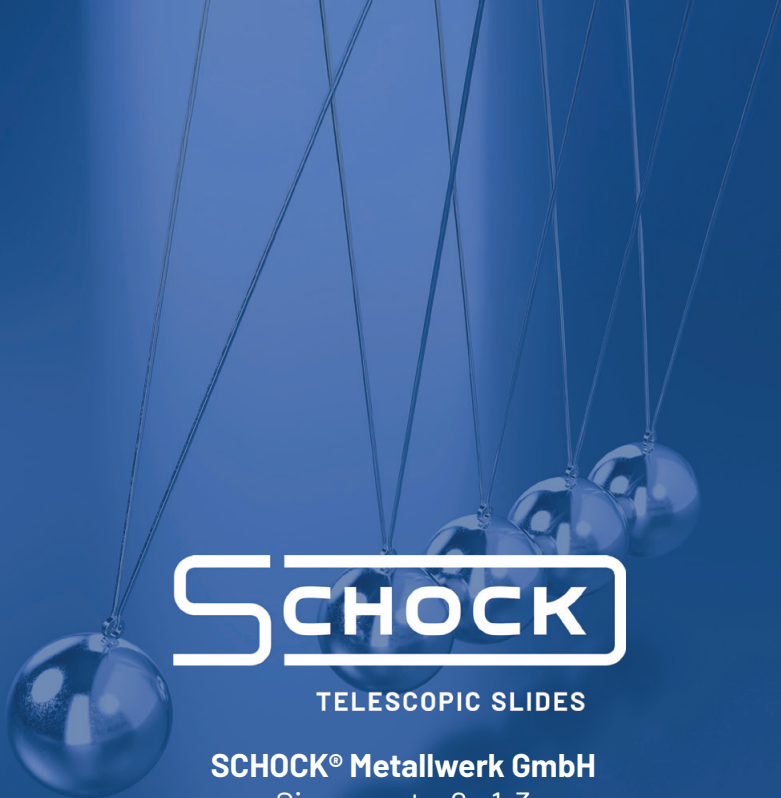
First, check whether there is a release lever or disengagement mechanism within the slide track. In some applications, the slide may also be secured by an additional carrier or bracket. If no clear removal mechanism is apparent, it may help to slightly lift the front of the drawer and then pull it outwards and upwards.

Remove any contamination from the raceways using a clean, lint-free cloth moistened with white spirit.

For drawer slides without a release mechanism, cleaning is carried out while installed. **Carefully wipe all accessible areas of the slide and remove dirt from hard-to-reach zones using compressed air.**

SCHOCK® telescopic slides are sufficiently lubricated for their entire service life. However, if cleaning is performed, the existing lubricant should subsequently be replenished with a high-quality lubricant suitable for drawer slides.





SCHOCK

TELESCOPIC SLIDES

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