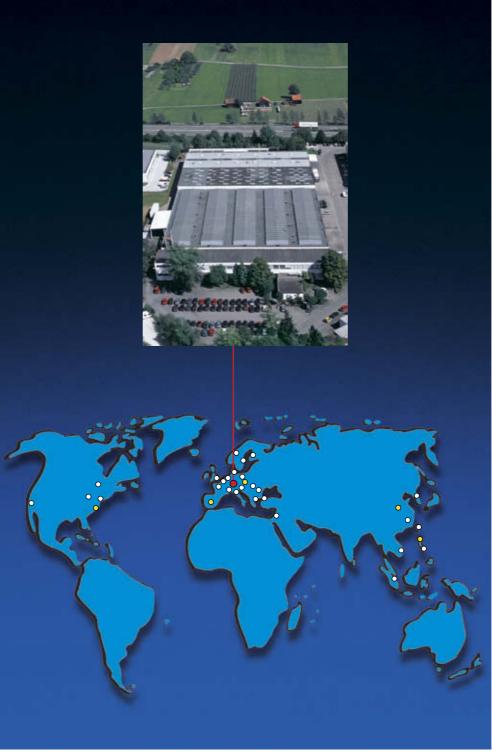
## Individual OEM Solutions.



Industrial Telescopic Slides.





Schock industrial telescopic slides set standards worldwide

- Schock headquarters, Urbach, Germany
- ullet Locations
- 0 Representatives

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Schock engineers and application technicians are well experienced and creative specialists in linear movement technology. Together with our customers we develop customized solutions to meet a wide range of technical and commercial requirements.

### Engineering for telescopic slides.

Schock has been designing and developing telescopic slides for the industry for more than 40 years. Schock offers customized solutions for professional industrial requirements.

Schock telescopic slides meet the highest requirements when it comes to functional reliability, precision, long service life and user convenience. These achievements are based on many of our own developments and various patents covering the manufacturing process and the products themselves. The special Schock roll-forming technique for example is the basis for the high-precision tolerances of the slide profiles. The powder-coating process developed by Schock is also unique throughout the world.

Thanks to our huge range of different slide profiles, we have the right solution for almost every requirement.

Our customers also benefit from our engineers' great experience in regards to the development of sophisticated special solutions. Whether in warehouse or operating facilities, electro-mechanics or 19"- technology, ATM or vending machines, copiers, domestic appliances, even high-tech applications in the field of the automotive industry or aerospace technology: Schock telescopic slides work reliably wherever they are found. Here at Schock, our objective has always been the perfect matching of our telescopic slides with the corresponding technical and commercial requirements. This includes the load capacity, the number of cycles, the slide travel, the mounting method and any special functional features or operating conditions.

The sooner Schock engineers are involved in developments, the better the technical performance and the cost calculation. In consultation with our experts, detail requirements can be specified and solutions optimised at an early stage.



Schock engineering services are aimed at the customer's specific project requirements. Even for the most complex requirements, our development engineers come up with system solutions to maximise the product benefits.

## Superior technology.

#### Schock engineers develop professional solutions for professional requirements.

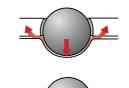
Schocks' superiority in the field of telescopic slides is based on the advantageous physical properties of the ball bearing slide, which is stable, self-cleaning and maintenance-free. Therefore, Schock industrial telescopic slides are renowned for their particularly quiet and smooth movement, even when fully loaded. Maintenance-free, they offer a long service life coupled with maximum functional reliability.





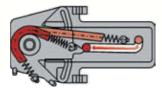
#### Perfect running properties

The roll-forming technique developed by Schock guarantees high-level precision in the production of slide profiles. The tolerances are more than 50% below those of comparable systems.



#### High durability

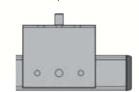
The ball provides the system advantage: with each slide travel, it pushes any deposit from the track. In addition, lateral impacts are absorbed elastically. This guarantees a long, maintenancefree service life.



#### Additional functions

Schock industrial telescopic slides are equipped with special features, depending on the type of application.

- Some typical examples are:
- hold-in / hold-out detent
- $\cdot$  positive locking
- $\cdot$  detachable inner rail
- $\cdot$  self-closing device



#### System attachment

Schock industrial telescopic slides are supplied as complete units which can be mounted quickly – often without the need for any tools. A wide range of fixing components is available for optimum installation.

### Versatile application possibilities.



The electronic modules for the on-board power supply of the ICE are equipped with Schock full extension slides. They work reliably and competently, even under the effect of more than 1000 N. Not even the permanent vibration impairs the performance of the slides.



Thanks to their robust design and self-cleaning ball-tracks, Schock telescopic slides are ideally suited for heavy industrial production processes. Here they can be seen in use in a transport system for motor vehicle glass skylights.

A high load capacity combined with the toolfree mounting of the metal racks are important requirements for telescopic slides in safes.





Tool storage cabinets demand a particularly tough construction of the telescopic slides. Only a detent with a high hold-in force can permanently prevent the unintentional opening of the fully loaded drawers. A central detent allows the drawers to be opened to either side.



The "Multiload-System" for extensible loadcarriers fitted in the boot of a vehicle is based on Schock telescopic slides. The platform can take a load of 120 kg. Comprehensive trial series under extreme climatic conditions have confirmed the complete fulfillment of all safety and durability requirements.

The powder-coated Schock linear slide is perfectly integrated both physically and visually into this modern vehicle central armrest.





Due to the many mechanical and climatic strains the vehicle interior is constantly subject to, it places a high demand on all of its components. The Schock full extension slide used in this cockpit drawer meets the requirements perfectly. The movement is smooth and completely silent.

Cold, heat, wet, dirt and vibrations – the external effects on the roof of a caravan are enormous. The Schock stainless steel slide for this panorama skylight has passed all of the functional tests with a perfect score.





This slide system for the supply of patient medications and infusions demands flexibility and user convenience. The Schock full extension slides allow easy access, while the supply racks and clear trays can be removed and installed without the aid of tools.



The two linear slides follow an exact curving path. This high precision necessary for the optics of a photocopier is achieved by means of a patented anti-racking control.

This new generation of high-performance dialysis machines uses Schock telescopic slides with special long-term corrosion protection and fulfills all of the hygienic and mechanical requirements specified in medical technology.





19"-technology demands standardised hole patterns, positive stops, detent features and quick-release systems.



The service module of this modern cash dispenser moves smoothly and reliably on Schock heavy-duty full extension slides.

### Always the optimum solution.

In this modern logistics centre, the slides are under a maximum amount of stress. As part of the conveyor system, the Schock heavy-duty slides in multi-pack construction show right around the clock just how reliable and durable they are.





In ovens the Schock stainless steel slides allow for a convenient

removal of the sheets. Thanks to a special high-temperature lubricant they can be used at temperatures of up to 300 °C. The flexible grid connection solutions also offer technical and logistic benefits for the manufacturer.



Durable, smooth-running and reliable: powdercoated Schock ball-bearing slides in refrigerators and deep freezers work with nourishment-proof low-temperature lubricants and are specially protected against corrosion.

Telescopic slides used in dishwashers are exposed to extreme usage conditions. The Schock stainless-steel telescopic slide is renowned for its smooth and quiet running combined with high lateral stability. The patented self-cleaning function guarantees long-term hygiene.

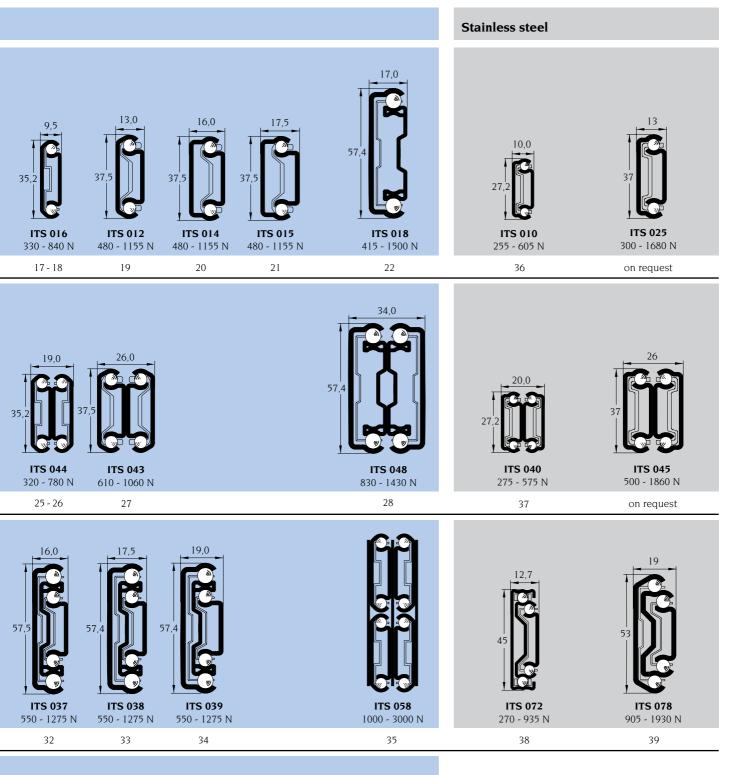


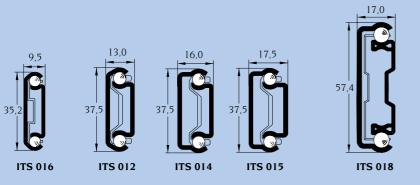
Programme overview	Stee	l		
Partial extension Travel approx. 70 – 80% of slide length		10,0 17,0 ITS 017 90 - 185 N	10,0 27,2 <b>ITS 010</b> 135 - 430 N	14,0 22,0 8,0 <b>ITS 061</b> 305 - 910 N
	page	14	15	16
Full extension «Classic» Travel ≥ 100% of slide length	1	20,0 7,0 1 1 1 5 0 4 2 0 - 155 N	20,0 27,2 27,2 1TS 040 215 - 405 N	
	page	23	24	
Full extension «Compact» Travel ≥ 100% of slide length	page	12,7 36 <b>ITS 071</b> 250 - 450 N on request	12,7 45 45 10 10 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 45 12,7 12,7 12,7 12,7 12,7 12,7 12,7 12,7	13,0 52,6 <b>175 036</b> 350 - 1005 N 30 - 31
Linear slide Travel within the slide length		10,0	10,0	

ITS 017

ITS 010

•••





CAD profile cross-sections with detailed dimensions can be found on the Internet at: http://www.schock-metall.de

#### Load ratings:

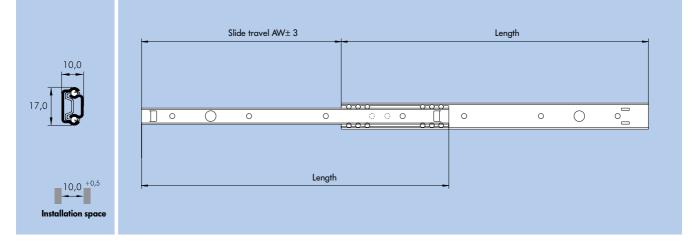
The specified load rates in Newtons (N) refer to the lowest value at 100,000 cycles and the highest value at 10,000 cycles within the model range.

#### Units of measure:

The profile dimensions are given in (mm).



## max. 185 N



Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
150	104	135	90	0,11
200	142	140	95	0,15
250	174	160	110	0,19
300	206	175	115	0,22
350	238	185	120	0,26
400	288	160	105	0,30

### A

Further lengths on request All data are examples subject to definition within the project

Mounting systems	page 42
hole patterns	•
bayonets	-
threads / pins	•
mounting brackets	•
Features	page 44
hold-out detent	puge ++
positive locking	-
center detent	_

center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	_
blocking device	_
self-closing device 25 mm / 50 mm	_/_
damping system	_

existing option

special development

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	-
plastic	•
Ball material	
Hardened precision steel	•
plastic	-
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	-
further RoHS-compliant finishes	•

max. 430 N

#### Slide travel AW± 3 Length 10,0 27, $\circ \circ \circ$ $\boxed{]} \circ \boxed{]}$ $\bigcirc$ o∏ ⇔ 0 0 0 $\bigcirc$ 0 $\circ$ $\circ$ $\circ$ 0 000 000 10,0 +0,5 Length Installation space

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Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
150	110	205	135	0,19
200	150	240	160	0,26
250	180	330	220	0,32
300	210	385	255	0,39
350	240	430	285	0,45
400	290	370	250	0,51
450	320	405	270	0,58
500	350	430	285	0,65

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

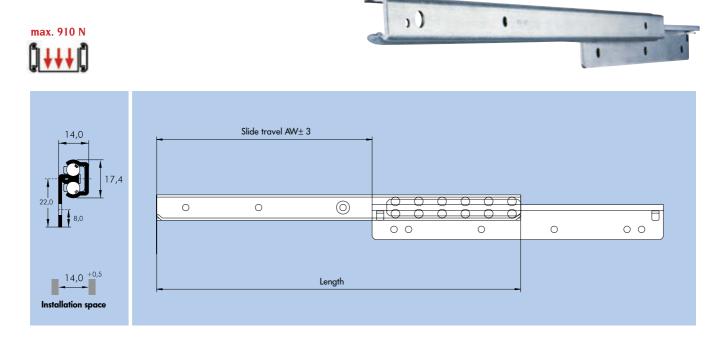
Features	page 44
hold-out detent	•
positive locking	-
center detent	•
positive stop in closed position	•
hold-in detent	•
detachable inner rail	-
blocking device	_
self-closing device 25 mm / 50 mm	• / -
damping system	_

• existing option

- special development

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page 46
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Length	AW	Load capacity per pair (N)		Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
250	180	330	305	0,32
300	210	385	410	0,39
350	240	430	480	0,45
400	290	370	535	0,51
450	320	405	575	0,58
500	350	430	605	0,65

### A

Further lengths on request All data are examples subject to definition within the project

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

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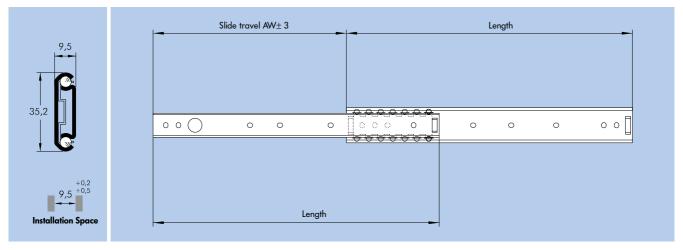
existing option

- special development

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	-
plastic	•
Ball material	
Hardened precision steel	•
plastic	•
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	-
further RoHS-compliant finishes	•







Length	AW	Load capacit	Weight	
mm/inches	mm	10.000 cycles	100.000 cycles	per pair(kg)
305/12	224	540	360	0,60
330/13	249	495	330	0,64
356/14	263	585	390	0,68
406/16	301	630	420	0,78
457/18	340	660	440	0,88
508/20	391	585	390	0,98
533/21	404	645	430	1,04
559/22	406	780	520	1,08
610/24	445	780	520	1,18
660/26	483	795	530	1,28

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	-
center detent	•
positive stop in closed position	•
hold-in detent	•
detachable inner rail	_
blocking device	-
self-closing device 25 mm / 50 mm	• / -
damping system	_

existing option

- special development

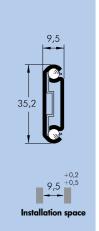
### A

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	-
Ball material	
Hardened precision steel	•
plastic	•
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes	•

detachable inner rail

## max. 840 N





	Slide travel AW±	3	Length	
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	for detach	Latch ble inner rail	Length	

Length	AW	Load capacity	y per pair (N)	Weight
mm/inches	mm	10.000 cycles	100.000 cycles	per pair (kg)
305/12	196	810	540	0,60
330/13	221	750	500	0,66
356/14	247	690	460	0,71
406/16	297	600	400	0,82
457/18	323	735	490	0,92
508/20	374	660	440	1,03
533/21	400	615	410	1,08
559/22	400	720	480	1,14
610/24	425	840	560	1,24
660/26	476	750	500	1,34

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	•
center detent	-
positive stop in closed position	•
hold-in detent	-
detachable inner rail	•
blocking device	-
self-closing device 25 mm / 50 mm	-/-
damping system	-

• existing option

special development

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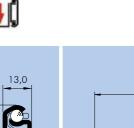
Cold-rolled precision coil steel     •       Ball cage material     •       pre-zinced steel     •       plastic     -       Ball material     •       Hardened precision steel     •       plastic     •		
Ball cage material         pre-zinced steel         plastic         Ball material         Hardened precision steel         plastic         Slide finish         hot-dip galvanized         powder-coated         cataphoretic painting	Slide material	page 46
pre-zinced steel  plastic  - Ball material Hardened precision steel  plastic  - Slide finish  page 46 hot-dip galvanized  powder-coated  cataphoretic painting  •	Cold-rolled precision coil steel	•
pre-zinced steel  plastic  - Ball material Hardened precision steel  plastic  - Slide finish  page 46 hot-dip galvanized  powder-coated  cataphoretic painting  •		
plastic     -       Ball material     •       Hardened precision steel     •       plastic     •       Slide finish     page 46       hot-dip galvanized     •       powder-coated     -       cataphoretic painting     •	Ball cage material	
Ball material         Hardened precision steel         plastic         Slide finish         page 46         hot-dip galvanized         powder-coated         -         cataphoretic painting	pre-zinced steel	•
Hardened precision steel•plastic•Slide finishpage 40hot-dip galvanized•powder-coated-cataphoretic painting•	plastic	-
Hardened precision steel•plastic•Slide finishpage 40hot-dip galvanized•powder-coated-cataphoretic painting•		
plastic     •       Slide finish     page 46       hot-dip galvanized     •       powder-coated     -       cataphoretic painting     •	Ball material	
Slide finishpage 46hot-dip galvanized•powder-coated-cataphoretic painting•	Hardened precision steel	•
hot-dip galvanized•powder-coated-cataphoretic painting•	plastic	•
hot-dip galvanized•powder-coated-cataphoretic painting•		
powder-coated – cataphoretic painting •	Slide finish	page 46
cataphoretic painting	hot-dip galvanized	•
	powder-coated	-
zinc electroplated and chromated / passivated	cataphoretic painting	•
- *	zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes •	further RoHS-compliant finishes	•

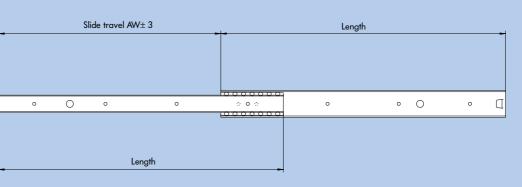


37,5

13,0 +0,5

Installation space





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Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	220	720	480	0,75
350	238	1045	695	0,87
400	272	1090	725	1,00
450	306	1125	750	1,12
500	340	1155	770	1,24
550	390	1040	695	1,36
600	424	1070	715	1,49
650	458	1095	730	1,61
700	508	1010	675	1,73
750	526	1135	755	1,85

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	-
center detent	•
positive stop in closed position	•
hold-in detent	•
detachable inner rail	-
blocking device	-
self-closing device 25 mm / 50 mm	• / -
damping system	-

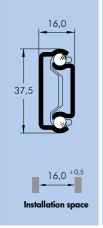
existing option

- special development

### A

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	•
Ball material	
Hardened precision steel	•
plastic	•
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes	•





	SI	ide travel AW	/± 3	 Length		
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		Le	ngth			

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Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	220	720	480	0,78
350	238	1045	695	0,91
400	272	1090	725	1,04
450	306	1125	750	1,16
500	340	1155	770	1,29
550	390	1040	695	1,42
600	424	1070	715	1,54
650	458	1095	730	1,67
700	508	1010	675	1,80
750	526	1135	755	1,93

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	-
center detent	•
positive stop in closed position	•
hold-in detent	•
detachable inner rail	-
blocking device	-
self-closing device 25 mm / 50 mm	• / -
damping system	-

existing option

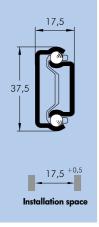
special development

### A

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	•
Ball material	
Hardened precision steel	•
plastic	•
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	-
further RoHS-compliant finishes	•







Slide travel AW± 3		Len	gth	
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Length				

Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	220	720	480	0,79
350	238	1045	695	0,93
400	272	1090	725	1,06
450	306	1125	750	1,19
500	340	1155	770	1,32
550	390	1040	695	1,44
600	424	1070	715	1,57
650	458	1095	730	1,71
700	508	1010	675	1,83
750	526	1135	755	1,97

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

page 44
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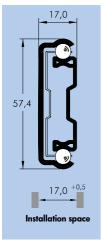
existing option

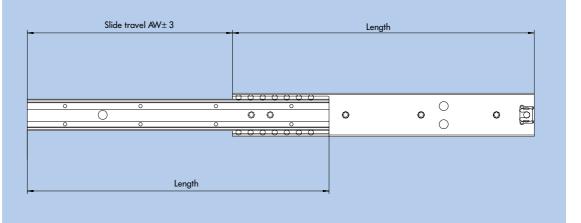
- special development

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Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	•
Ball material	
Hardened precision steel	•
plastic	•
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	-
further RoHS-compliant finishes	•







Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	220	625	415	1,32
350	238	1195	795	1,54
400	272	1300	870	1,77
450	306	1380	920	1,99
500	340	1440	960	2,22
550	390	1290	860	2,44
600	424	1350	900	2,67
650	458	1395	930	2,89
700	492	1435	960	3,11
750	526	1470	980	3,34

I	Length	AW	Load capacit	y per pair (N)	Weight
	mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
	800	560	1500	auf Anfrage	3,56
	900	644	1430	auf Anfrage	4,01
	1000	728	1350	auf Anfrage	4,45
	1100	812	1440	auf Anfrage	4,90
	1200	896	1300	auf Anfrage	5,34

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Further lengths on request All data are examples subject to definition within the project

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	_
Ball material	
Hardened precision steel	•
plastic	-
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes	•

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

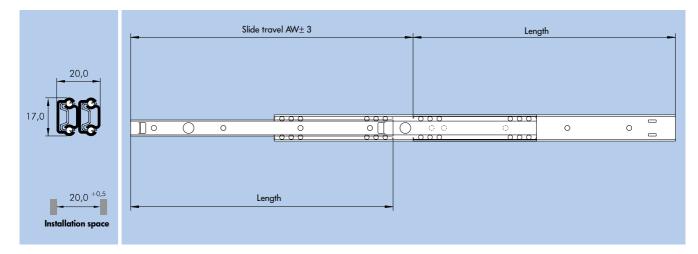
Features	page 44
hold-out detent	•
positive locking	-
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	-
blocking device	-
self-closing device 25 mm / 50 mm	-/-
damping system	-

existing option

special development

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## max. 155 N



Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
150	172	110	70	0,23
200	232	115	75	0,30
250	272	150	100	0,38
300	332	135	90	0,46
350	372	150	100	0,54
400	424	155	105	0,61

Further lengths on request All data are examples subject to definition within the project

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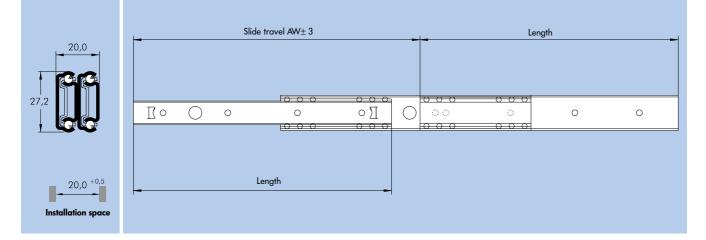
• existing option

- special development

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	-
plastic	•
Ball material	
Hardened precision steel	•
plastic	-
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	-
further RoHS-compliant finishes	•



## max. 405 N



Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
150	160	330	220	0,40
200	220	320	215	0,53
250	260	375	250	0,67
300	310	385	255	0,80
350	360	395	260	0,93
400	420	400	265	1,07
450	470	405	270	1,21
500	510	395	260	1,35

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	-
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	-
blocking device	-
self-closing device 25 mm / 50 mm	-/-
damping system	-

existing option

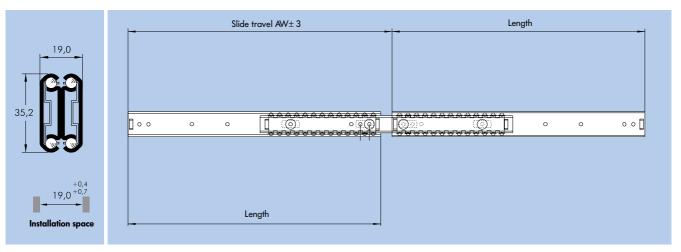
special development

### A

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	•
Ball material	
Hardened precision steel	•
plastic	•
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes	•



## max. 765 N



Length	AW	Load capacit	Weight	
mm/inches	mm	10.000 cycles	100.000 cycles	per pair (kg)
305/12	318	480	320	1,13
330/13	344	660	440	1,33
356/14	372	675	450	1,52
406/16	424	705	470	1,72
457/18	478	720	480	1,91
508/20	532	735	490	2,11
533/21	558	735	490	2,30
559/22	586	750	500	2,49
610/24	640	750	500	2,69
660/26	692	765	510	2,88

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	_
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	_
blocking device	-
self-closing device 25 mm / 50 mm	-/-
damping system	-

• existing option

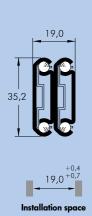
- special development

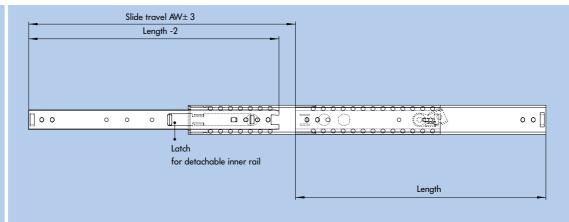
### A

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	-
Ball material	
Hardened precision steel	•
plastic	•
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes	•

detachable inner rail

## max. 780 N





0 0

Length	AW	Load capacit	Weight	
mm/inches	mm	10.000 cycles	100.000 cycles	per pair (kg)
305/12	316	675	450	1,15
330/13	353	675	450	1,35
356/14	381	680	455	1,54
406/16	433	735	490	1,74
457/18	484	745	495	1,93
508/20	531	765	510	2,13
533/21	554	765	510	2,33
559/22	585	765	510	2,52
610/24	636	775	515	2,72
660/26	687	780	520	2,91

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	•
center detent	-
positive stop in closed position	•
hold-in detent	-
detachable inner rail	•
blocking device	-
self-closing device 25 mm / 50 mm	-/-
damping system	-

• existing option

- special development

### A

Further lengths on request All data are examples subject to definition within the project

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Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	-
Ball material	
Hardened precision steel	•
plastic	•
Slide finish	page 46
hot-dip galvanized	•
powder-coated	-
cataphoretic painting	•
zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes	•

# max. 1060 N



	<b>H</b> =	Slic	de travel AW±	3				Length			
26,0											
37,5			<del>Го</del>	0000	$\mathbf{b}$	000	000	000			-
	0	0	0	0	0	00	0	ं	0	0	$\Box$
				0000		$  \circ \circ \circ$	000	000			
26,0 <sup>+0,5</sup> Installation space	-		Length								

Length	AW	Load capacit	Weight	
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	300	940	630	1,51
350	360	920	610	1,76
400	396	1030	685	2,02
450	450	1030	685	2,27
500	496	1050	700	2,52
550	570	960	640	2,76
600	600	1030	690	3,03
650	660	1045	695	3,28
700	720	1000	670	3,54
750	740	1060	710	3,80

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	_
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	_
blocking device	-
self-closing device 25 mm / 50 mm	-/-
damping system	-

existing option

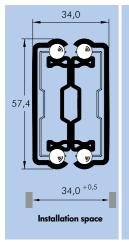
- special development

### 

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	•
Ball material	
Hardened precision steel	•
plastic	•
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes	•



## max. 1430 N



Slide travel AW $\pm 3$	Length
Length	

Length	AW	Load capacity per pair (N)		Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	296	1245	830	2,64
350	348	1300	865	3,08
400	400	1350	900	3,54
450	452	1330	885	3,98
500	504	1310	870	4,44
550	556	1340	890	4,88
600	608	1365	910	5,34
650	668	1370	915	5,78
700	728	1375	920	6,22
750	764	1405	935	6,68

Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
800	800	1430	on request	7,13
900	904	1370	on request	8,02
1000	1008	1360	on request	8,91
1100	1096	1310	on request	9,80
1200	1200	1350	on request	10,69

### A

Further lengths on request All data are examples subject to definition within the project

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	-
Ball material	
Hardened precision steel	•
plastic	-
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes	•

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	_
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	_
blocking device	-
self-closing device 25 mm / 50 mm	-/-
damping system	-

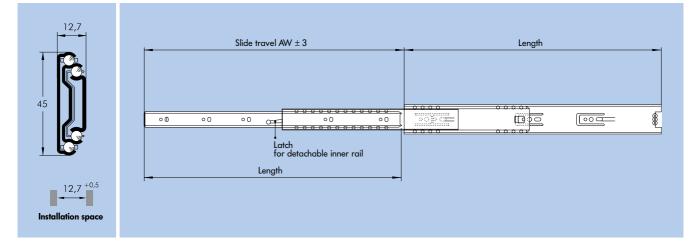
existing option

special development

detachable inner rail



# max. 675 N



Length	AW	Load capacity per pair (N)		Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	305	480	320	0,88
350	356	540	360	1,02
400	406	570	380	1,17
450	457	585	390	1,33
500	508	600	400	1,46
550	559	615	410	1,61
600	610	630	420	1,75
650	660	645	430	1,90
700	710	675	450	2,05

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	-
positive locking	-
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	•
blocking device	-
self-closing device 25 mm / 50 mm	• / -
damping system	-

existing option

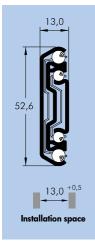
- special development

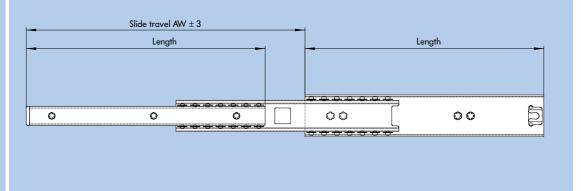
### A

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	•
Ball material	
Hardened precision steel	•
plastic	-
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	-
zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes	•



## max. 975 N





Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	350	525	350	1,30
350	400	630	420	1,54
400	450	705	470	1,76
450	500	765	510	2,00
500	550	825	550	2,22
550	600	885	590	2,44
600	650	915	610	2,68
650	700	945	630	2,90
700	750	960	640	3,12
750	800	975	650	3,36

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	-
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	-
blocking device	-
self-closing device 25 mm / 50 mm	• / •
damping system	•

existing option

special development

### A

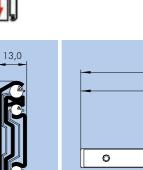
Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	-
Ball material	
Hardened precision steel	•
plastic	-
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	-
further RoHS-compliant finishes	•

detachable inner rail

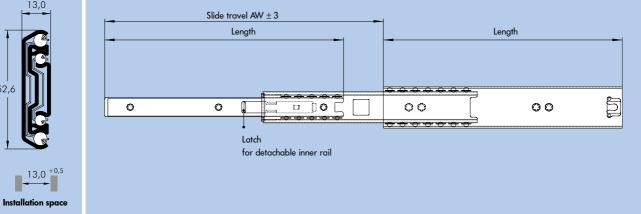
### max. 1005 N Ď₩₩Ĉ

52,6

-







Length	AW	Load capacity per pair (N)		Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	350	540	360	1,30
350	400	660	440	1,54
400	450	750	500	1,76
450	500	810	540	2,00
500	550	855	570	2,22
550	600	900	600	2,44
600	650	930	620	2,68
650	700	960	640	2,90
700	750	975	650	3,12
750	800	1005	670	3,36

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	•
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	•
blocking device	-
self-closing device 25 mm / 50 mm	_/_
damping system	-

• existing option

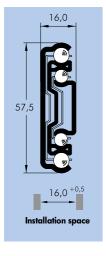
- special development

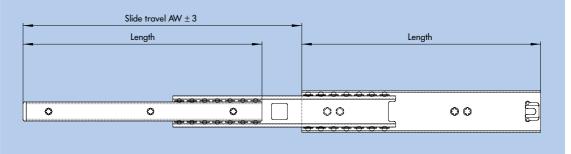
### A

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	-
Ball material	
Hardened precision steel	•
plastic	-
Slide finish	page 46
hot-dip galvanized	•
powder-coated	-
cataphoretic painting	•
zinc electroplated and chromated / passivated	-
further RoHS-compliant finishes	•



## max. 1275 N





Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	350	825	550	1,65
350	400	930	620	1,94
400	450	1020	680	2,21
450	500	1080	720	2,50
500	550	1140	760	2,79
550	600	1170	780	3,08
600	650	1215	810	3,37
650	700	1245	830	3,67
700	750	1260	840	3,96
750	800	1275	850	4,25

Length	AW	Load capacity per pair (N)		Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
800	800	1260	on request	4,53
900	900	1210	on request	5,12
1000	1000	1140	on request	5,72
1100	1100	1020	on request	6,31
1200	1200	850	on request	6,90

### 

Further lengths on request All data are examples subject to definition within the project

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	-
Ball material	
Hardened precision steel	•
plastic	-
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	-
further RoHS-compliant finishes	•

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

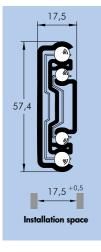
Features	page 44
hold-out detent	•
positive locking	-
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	-
blocking device	•
self-closing device 25 mm / 50 mm	• / •
damping system	•

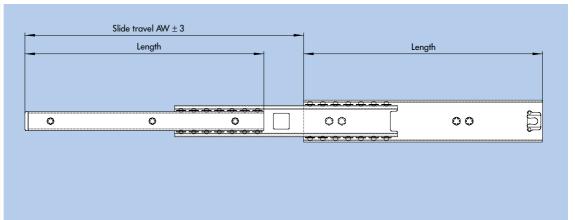
existing option

special development



### max. 1275 N ĺ**↓↓**↓ĺ





Length

AW

Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	350	825	550	1,67
350	400	930	620	1,96
400	450	1020	680	2,25
450	500	1080	720	2,54
500	550	1140	760	2,83
550	600	1170	780	3,13
600	650	1215	810	3,42
650	700	1245	830	3,72
700	750	1260	840	4,02
750	800	1275	850	4,31

mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
800	800	1260	on request	4,60
900	900	1210	on request	5,20
1000	1000	1140	on request	5,80
1100	1100	1020	on request	6,40
1200	1200	850	on request	7,00

Load capacity per pair (N) Weight

A Further lengths on request All data are examples subject to definition within the project

Slide material	page 46
Cold-rolled precision coil steel	•
A	
Ball cage material	
pre-zinced steel	•
plastic	_
Ball material	
Hardened precision steel	•
plastic	-
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	•
further RoHS-compliant finishes	•

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

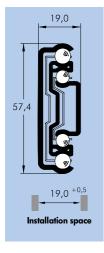
Features	page 44
hold-out detent	•
positive locking	-
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	-
blocking device	•
self-closing device 25 mm / 50 mm	• / •
damping system	•

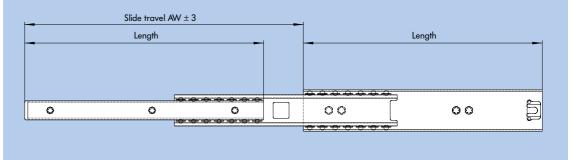
• existing option

- special development



## max. 1275 N





Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	350	825	550	1,68
350	400	930	620	1,98
400	450	1020	680	2,27
450	500	1080	720	2,57
500	550	1140	760	2,86
550	600	1170	780	3,15
600	650	1215	810	3,45
650	700	1245	830	3,76
700	750	1260	840	4,05
750	800	1275	850	4,35

Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
800	800	1260	on request	4,65
900	900	1210	on request	5,28
1000	1000	1140	on request	5,88
1100	1100	1020	on request	6,46
1200	1200	850	on request	7,08

### A

Further lengths on request All data are examples subject to definition within the project

Slide material	page 46
Cold-rolled precision coil steel	•
Ball cage material	
pre-zinced steel	•
plastic	-
Ball material	
Hardened precision steel	•
plastic	-
Slide finish	page 46
hot-dip galvanized	•
powder-coated	•
cataphoretic painting	•
zinc electroplated and chromated / passivated	-
further RoHS-compliant finishes	•

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	-
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	_
blocking device	-
self-closing device 25 mm / 50 mm	• / •
damping system	•

existing option

special development

## Heavy-duty full extension ITS 058

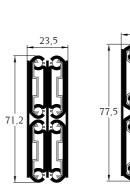


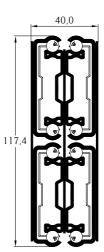
#### **Multi-pack construction**

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. Application areas:

- Heavy-duty applications
- Storage and factory equipment
- Vehicle equipment
- Engineering

Schock heavy-duty slide ITS 058 in multi-pack construction. Using existing standard slide profiles, around 10,000 customised heavy-duty slides can be supplied, with load rates of up to 3000 N.



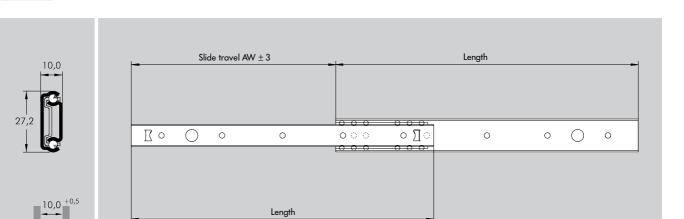


## Stainless steel ITS 010

#### Partial extension

Installation space

max. 605 N ĺ₩#



Length

3000) 0

Length	AW	Load capacit	y per pair (N)	Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
250	177	380	255	0,33
300	207	500	335	0,40
350	247	495	330	0,47
400	277	565	380	1,54
450	317	555	370	0,60
500	347	605	400	0,67

### A

Further lengths on request All data are examples subject to definition within the project

page 42
•
•
•
•
-

Features	page 44	
hold-out detent	•	
positive locking	-	
center detent	•	
positive stop in closed position	•	
hold-in detent	•	
detachable inner rail	-	
blocking device	-	
self-closing device 25 mm / 50 mm	• / -	
damping system		

Slide material		page 46
stainless steel		•
Ball cage material		
stainless steel		•
plastic		•
Ball material		
stainless steel		•
plastic		•
<ul> <li>existing option</li> </ul>	<ul> <li>special development</li> </ul>	

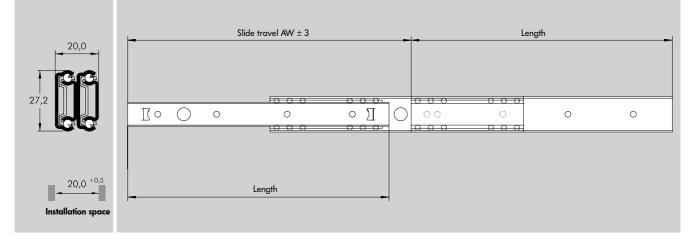
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## Stainless steel ITS 040

### Full extension







Length	AW	Load capacity per pair (N)		Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
250	284	415	275	0,69
300	334	480	320	0,84
350	384	505	340	0,98
400	434	540	360	1,13
450	484	565	375	1,28
500	534	575	385	1,42

### A

Further lengths on request All data are examples subject to definition within the project

Mounting systems	page 4
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	•
positive locking	-
center detent	_
positive stop in closed position	٠
hold-in detent	•
detachable inner rail	_
blocking device	-
self-closing device 25 mm / 50 mm	-/-
damping system	-

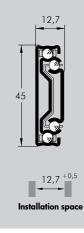
Slide material	р	age 46
stainless steel		•
Ball cage material		
stainless steel		•
plastic		•
Ball material		
stainless steel		•
plastic		•
<ul> <li>existing option</li> </ul>	- special development	

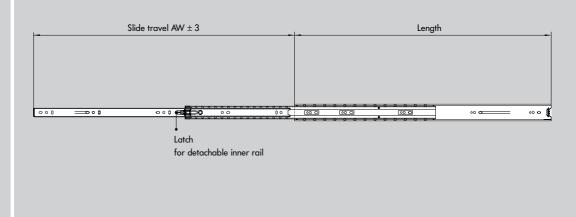
## Stainless steel ITS 072

### Full extension









Length	AW	Load capacity per pair (N)		Weight
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	312	405	270	1,04
350	362	695	460	1,20
400	412	800	535	1,38
450	462	835	555	1,54
500	512	860	575	1,71
550	562	890	590	1,88
600	612	910	605	2,05
650	662	925	615	2,21
700	712	935	625	2,38

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	-
positive locking	-
center detent	-
positive stop in closed position	•
hold-in detent	•
detachable inner rail	•
blocking device	-
self-closing device 25 mm / 50 mm	• / -
damping system	-

### 

Further lengths on request All data are examples subject to definition within the project

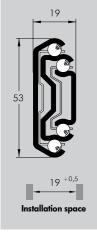
Slide material		page 46
stainless steel		•
Ball cage material		
stainless steel		•
plastic		-
Ball material		
stainless steel		•
plastic		-
<ul> <li>existing option</li> </ul>	<ul> <li>special development</li> </ul>	

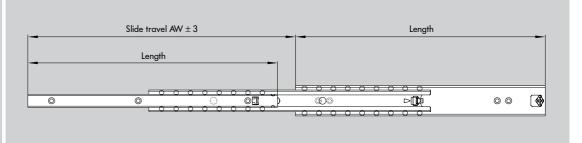
## Stainless steel ITS 078

Full extension









Length	AW	Load capacit	Weight	
mm	mm	10.000 cycles	100.000 cycles	per pair (kg)
300	337	1355	905	1,75
350	386	1485	990	2,05
400	435	1580	1050	2,34
450	484	1660	1105	2,63
500	534	1720	1145	2,90
550	583	1775	1180	3,22
600	632	1815	1210	3,51
650	681	1850	1230	3,80
700	730	1880	1255	4,09
750	780	1900	1265	4,38
800	829	1930	1285	4,68

Mounting systems	page 42
hole patterns	•
bayonets	•
threads / pins	•
mounting brackets	•

Features	page 44
hold-out detent	-
positive locking	-
center detent	-
positive stop in closed position	٠
hold-in detent	•
detachable inner rail	_
blocking device	-
self-closing device 25 mm / 50 mm	-/-
damping system	_

### A

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Slide material		page 46
stainless steel		•
Ball cage material		
stainless steel		•
plastic		-
Ball material		
stainless steel		•
plastic		-
existing option	- special development	



The principle of the ball bearing slide makes the difference: the unique ball-track geometry of Schock industrial telescopic slides offers decisive advantages – such as permanently smooth movement even after more than 100,000 cycles.

### High load ratings.

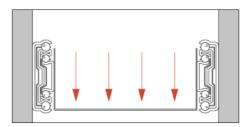
### Schock telescopic slides guarantee high load rates coupled with a long service life.

The dynamic load capacity of Schock telescopic slides specifies the maximum load capacity of a vertically mounted pair of slides in the extended position using all of the available attachment points. The slides are tested in movement cycles, one cycle corresponding to one opening and closing movement.

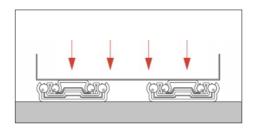
The lower the number of cycles, the greater the load that can be placed on the slide. In addition to the load rates of 10.000 cycles, which are most often sufficient for industrial applications, Schock also specifies rates for 100.000 cycles. This data confirms the design quality and superiority of the unique Schock ball bearing slide technology.

In principle, the load capacity of a telescopic slide is governed by the following influence factors:

- Slide length
- Travel
- Number of cycles
- Material
- Installation method
- Mounting system



Vertically-mounted Schock telescopic slides are characterised by the ball-tracks arranged one above the other. This special construction makes them extremely resistant to distortion, and significantly increases the service life and load capacity of the slides.



In principle, Schock telescopic slides can also be installed horizontally. However, in this case the load rates are approximately 50 – 60% lower than for vertically-mounted slides.

### Economical mounting systems.

## Fast and easy mounting is a characteristic feature of all Schock telescopic slides.

Schock precision ball-bearing slides are 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.

Innovative solutions such as the quickrelease system or the patented snapconnection technology contribute to minimising installation costs. Schock also develops special and perfectly integrated solutions for special customer requirements.

For economical system mounting, Schock also provides a wide selection of standard hole patterns, bayonet lancings, studs, bolts and mounting brackets.



The fixing of this wire basket was developed especially for a North American manufacturer of refrigerators and deep freezers: Two plastic clips allow for tool-free mounting and easy removal of the basket by the end user.



The drawers of this professional tool storage unit can easily be clipped onto the slides by means of a patented detent which fastens them automatically and reliably.



Round holes







Bayonet lancing



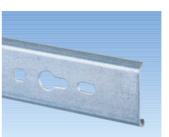
Countersunk holes



Support brackets



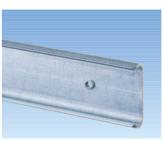
Spacer lancing



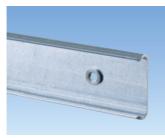
Alternative holes



Brackets with pin



Thread piercing



Press-nuts



Mounting brackets







Installation hooks



Press-bolts

Further attachment elements for economical installation available on request. With over 150 attachment standards, Schock offers the optimum solution for every application.

## Superior functional features.

## The advantages of the Schock telescopic slides are based on a variety of reasoned-out details.

Well-tried technologies ensure perfect movements even under high demands. Upon customer request it is easily possible to define the running resistance, the synchronization of the movement process and the acoustic reaction – all of these being only examples of the various possibilities. A great variety of reasoned-out details individually extend the functionality and improve the efficiency for each single use.

Example "Tilt-Control": The integrated blocking device functions as an antitilting device when dealing with multiple units. It prevents the simultaneous opening of more than one slide at a time.

Example "Soft Control" : The integrated damping system supports the automatic, non-racking and silent closing of full extension slides.



Anti-racking-control for a 100% exact positioning of linear slides. This achieves an extremely smooth and easy movement thus making it an

ideal option for engine-driven units.



The rack-and-pinion parallel guidance allows for a 100% synchronized movement of telescopic slides. The patented rack extends telescopically, thereby creating

an over-extension.

#### **Examples for superior functions**

### 1 Positive Stop

Defined end position of a ball bearing slide **2 Detent** 

fixes the slide with a pre-defined force either in the opened or in the closed position

3 Positive locking

retains the slide in opened position

**4** *Center detent* fixes slides extending to either side in the closed position

5 Detachable inner rail

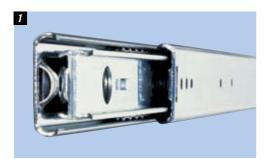
allows for the inner slide member to be detached**Blocking device** "Tilt-Control"

prevents the simultaneous opening of more than one slide

**7** Self-closing device automatically pulls the opened slide into the end position upon closing

8 Damping system "Soft Control"

damps the unit while pulling it into its end position



Positive Stop



Positive locking



Detachable inner rail



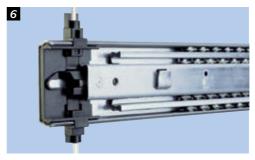
Self-closing device



Detent



Center detent



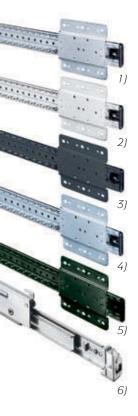
Blocking device "Tilt-Control"



Damping system "Soft Control"

## Materials and finishes.

Corrosion resistance	
Finish	Restistance time*
hot-dip galvanized	24 hours
powder-coated	96-120 hours
cataphoretic painting	192-432 hours
zinc electroplated and blue passivated	24 hours
zinc-iron-coated and black passivated	42 hours
zinc electroplated and yellow chromated - Cr(VI)	120 hours
zinc-iron-coated and black chromated - Cr(VI)	168 hours
further RoHS-compliant finishes	240-720 hours
*Basis: Salt spray test ISO 9227 (guidelines for white rust)	



### Finishes:

- 1) hot-dip galvanized
- 2) powder-coated
- 3) cataphoretic painting
- 4) zinc electroplated and blue passivated
- 5) zinc-iron-coated
- and black passivated 6) stainless steel
- o) eta.....ooo etee.



Schock powdercoating keeps the ball tracks clear, preserving the good running properties.

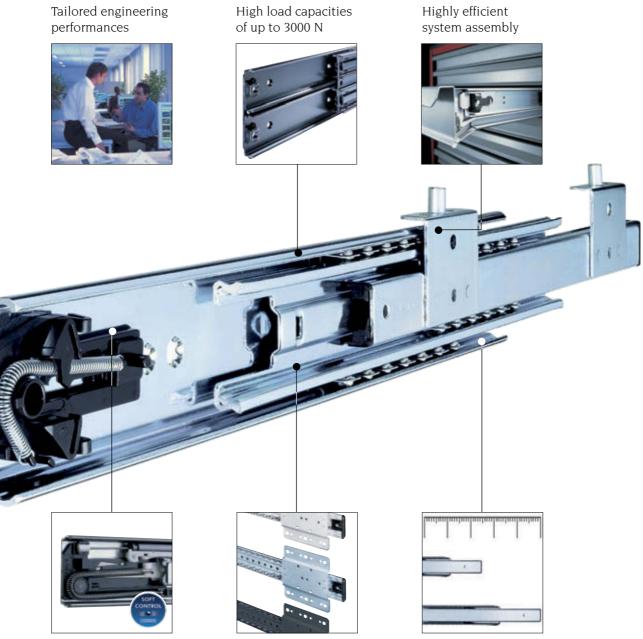
### Schock generally supplies ball bearing slides and telescopic slides RoHs-compliant. Upon customer request other surface finishes are available.

Thanks to its cathodic edge protection, hot-dip galvanized steel offers the perfect combination of quality and and costeffectivity. Additional powder-coating ensures a high-quality visual effect and effective long-term corrosion protection.

Depending on specific demands Schock offers further RoHS-compliant surfaces. Telescopic slides made of stainless steel to be used under extreme conditions complete our wide range of products.

In addition to steel and stainless steel, Schock uses innovative and highperformance plastic materials for the interaction of balls and ball cages. The technological know-how of our Schock engineers pertaining to different materials becomes evident in regards to mechanical assemblies such as the self-closing device: all moving parts must continue to function faultlessly and reliably even after over 100.000 movement cycles.

# Optimum product configuration for every application.



Superior functionality

Finishes for all kinds of applications

Lenghts ranging from 100 mm to 2000 mm

## Engineering from Schock.







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