

General information

Telescopic slides offer smooth running, wear-free, and quiet linear motion. They are used in a very wide range of applications. Telescopic slides range from the most simple extensions and drawers to high-quality versions. The slides are used in the industrial environment on machines, production systems, and equipment.

The telescopic slides have a multitude of positive features from an economic standpoint. A few examples of use for the slides: sliding doors, protective hoods, keyboards and PC pullouts, vehicle equipment, storage shelves, battery boxes etc.

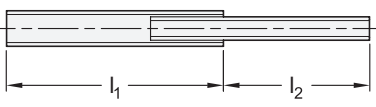
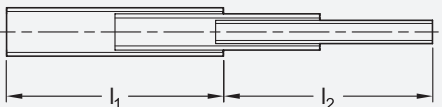
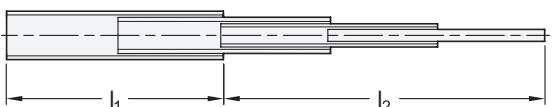
Telescopic slides can come with a number of component options. Slides are available for one of the two stop positions and they are defined by the type in the article number.

Structure

Telescopic slides consist of an outer and inner slide as well as the addition of one or two middle slides depending on design and / or required extension lengths. The slides are interconnected through appropriately shaped geometry and move by means of ball bearings. A ball cage keeps the bearings spaced and in position.

The slides are usually mounted through countersunk holes or through-holes. Other options, such as threaded bolts or support brackets, are available as an alternative.

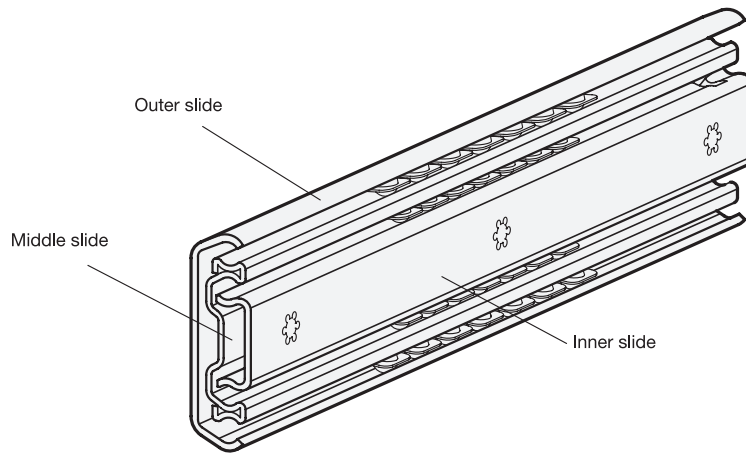
In regard to the length of the extension, telescopic slides can be divided into three categories: partial extension, full extension, and over extension. The categories are defined by the achievable stroke l_2 , which is listed in relation to the nominal length l_1 .

Type of extension	Extension diagram
Partial extension: $l_1 = 100\% \rightarrow l_2 = \text{min. } 75\%$	 <p>The diagram shows a telescopic slide with an outer tube of length l_1 and an inner tube of length l_2. The inner tube is partially extended from the outer tube, with l_2 being less than l_1.</p>
Full extension: $l_1 = 100\% \rightarrow l_2 = \text{min. } 100\%$	 <p>The diagram shows a telescopic slide with an outer tube of length l_1 and an inner tube of length l_2. The inner tube is fully extended from the outer tube, with l_2 equal to l_1.</p>
Over extension: $l_1 = 100\% \rightarrow l_2 = \text{min. } 150\%$	 <p>The diagram shows a telescopic slide with an outer tube of length l_1 and an inner tube of length l_2. The inner tube is extended beyond the outer tube, with l_2 being greater than l_1.</p>

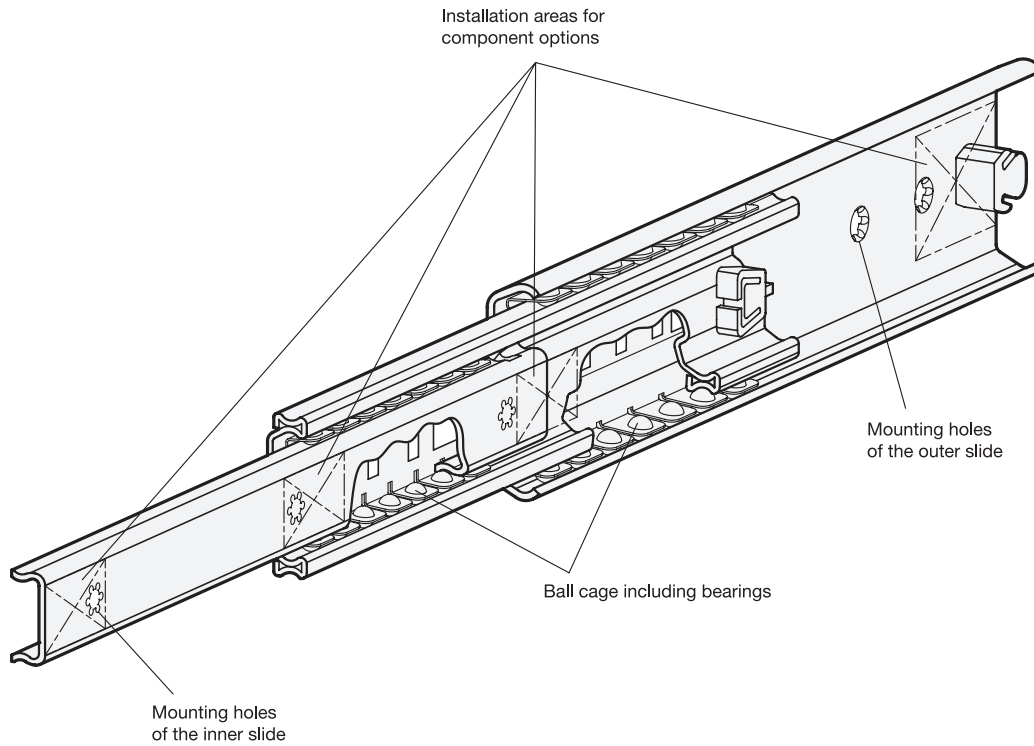
All slides have internally constructed stops in the front and back end position. The stops prevent the slides from extending unintentionally. Depending on the available installation space and required stability, the stops are designed accordingly in a metallic form or with additional plastic or elastomer parts as a rubber stop to prevent the slides from hitting the end positions with too much force.

The telescopic slides can come with a variety of accessory functions. Examples include locking devices, latches, detach functions, and self-retracting mechanisms, some of which are dampened. Some additional functions are available, depending on slide variant, for the back or front stop position and in combination. Furthermore, customer-specific modifications regarding the fastening of the slides can be made.

Telescopic slides with full extension, back stop position



Telescopic slides with full extension, front stop position



Telescopic Slides

Types

Standard	Type of extension		Load capacity Per pair at 10,000 cycles	Basic length Retracted position	Material Steel ST Stainless steel NI	Fastening Through-holes (ld. no. 1)	Countersunk holes (ld. no. 2)	Outer slide, through-holes / Inner slide, countersunk holes (ld. no. 3)
	Partial extension T	Full extension V						
GN 1400	T		280 N <i>(62.95 lbf)</i>	300 - 500 mm <i>(11.81 - 19.69 in)</i>	ST	×		
GN 1404	T		780 N <i>(175.35 lbf)</i>	300 - 700 mm <i>(11.81 - 27.56 in)</i>	ST			×
GN 1410	V		510 N <i>(114.65 lbf)</i>	250 - 800 mm <i>(9.84 - 31.50 in)</i>	ST	×		
GN 1412	V		430 N <i>(96.67 lbf)</i>	300 - 700 mm <i>(11.81 - 27.56 in)</i>	ST	×		
GN 1420	V		1290 N <i>(290 lbf)</i>	300 - 1200 mm <i>(11.81 - 47.24 in)</i>	ST		×	
GN 1422	V		1290 N <i>(290 lbf)</i>	300 - 800 mm <i>(11.81 - 31.50 in)</i>	ST		×	
GN 1424	V		750 N <i>(168.61 lbf)</i>	350 - 700 mm <i>(13.78 - 27.56 in)</i>	ST		×	
GN 1426	V		1380 N <i>(310.24 lbf)</i>	500 - 800 mm <i>(19.69 - 31.50 in)</i>	ST		×	
GN 1430	V		2120 N <i>(476.60 lbf)</i>	400 - 1200 mm <i>(15.75 - 47.24 in)</i>	ST		×	
GN 1432	V		2300 N <i>(517.06 lbf)</i>	400 - 800 mm <i>(15.75 - 31.50 in)</i>	ST		×	
GN 1440 Type B	V		3100 N <i>(696.91 lbf)</i>	300 - 1500 mm <i>(11.81 - 59.05 in)</i>	ST	×		
GN 1440 Type M	V		3100 N <i>(696.91 lbf)</i>	300 - 1500 mm <i>(11.81 - 59.05 in)</i>	ST	×		
GN 1440 Type K	V		3100 N <i>(696.91 lbf)</i>	300 - 1500 mm <i>(11.81 - 59.05 in)</i>	ST	×		
GN 1440 Type Q	V		3100 N <i>(696.91 lbf)</i>	300 - 1500 mm <i>(11.81 - 59.05 in)</i>	ST	×		
GN 1450	V		510 N <i>(114.65 lbf)</i>	300 - 600 mm <i>(11.81 - 23.62 in)</i>	NI	×		

Telescopic Slides

Types

Standard	Component features								
	Without rubber stop	With rubber stop back-front	Locking device back Type E	Locking device back, detach function Type F	Latch back Type M	Latch front Type K	Latch back-front Type Q	Self-retracting mechanism, dampened / not dampened	Extension on both sides
GN 1400	×								
GN 1404		×	×						
GN 1410		×		×					
GN 1412		×		×				×	
GN 1420		×	×						
GN 1422		×						×	
GN 1424		×						×	
GN 1426		×							×
GN 1430		×	×						
GN 1432		×						×	
GN 1440 Type B		×							
GN 1440 Type M		×			×				
GN 1440 Type K		×				×			
GN 1440 Type Q		×					×		
GN 1450		×		×					