

General information

Telescopic slides offer smooth-running, wear-free, and quiet linear motion. They are used in a wide variety of applications. It ranges from the simplest extensions and drawers to high-quality versions, which are used in the industrial environment on machines, production systems, and fixtures. They have a multitude of positive features and are also particularly interesting from an economic standpoint.

Typical application examples are: sliding doors, protective covers, keyboards and PC pull-outs, vehicle equipment, storage trays, battery boxes, etc.

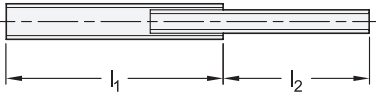

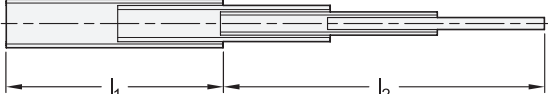
Telescopic slides can come with a number of equipment options. They are available for one of the two end positions but also in combination. The options are defined by the type in the part number.

Design

Telescopic slides consist of an outer and an inner slide as well as, depending on the type or the required extension length, one or two additional middle slides. The slides are made of sheet metal, are interconnected through appropriately shaped geometry and move by means of bearing balls. A ball cage keeps the balls spaced and in position.

The slides are usually mounted with countersunk holes or through holes. Other options, such as threaded bolts or support brackets, are available on request.

With regard to the extension length, 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: $l_1 = 100\% \rightarrow l_2 = \text{min. } 75\%$	
Full extension: $l_1 = 100\% \rightarrow l_2 = \text{min. } 100\%$	
Over extension: $l_1 = 100\% \rightarrow l_2 = \text{min. } 150\%$	

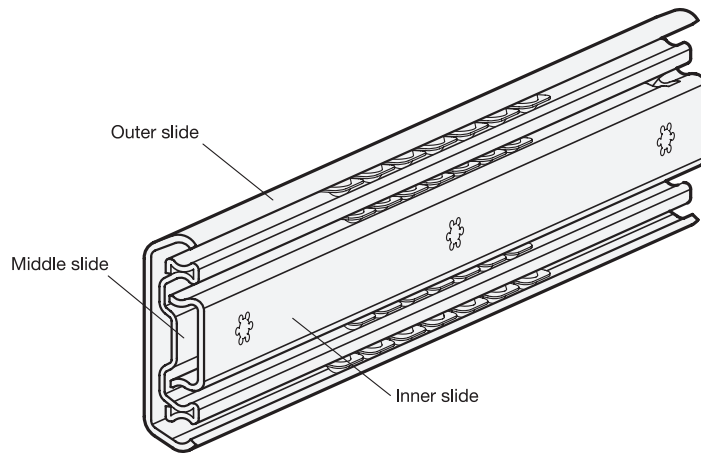
All slides have internally installed stops in the extended and retracted end position to prevent unintentional pulling apart. Depending on the available installation space and required stability, the stops are designed accordingly in a metallic form or with additional plastic or elastomer parts as a rubber stop to prevent the slides from hitting the end positions with too much force.

Furthermore, 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. Depending on the slide version, these additional functions are available for the extended or retracted end position or in combination. In addition, customer-specific modifications regarding the mounting of the slides are possible.

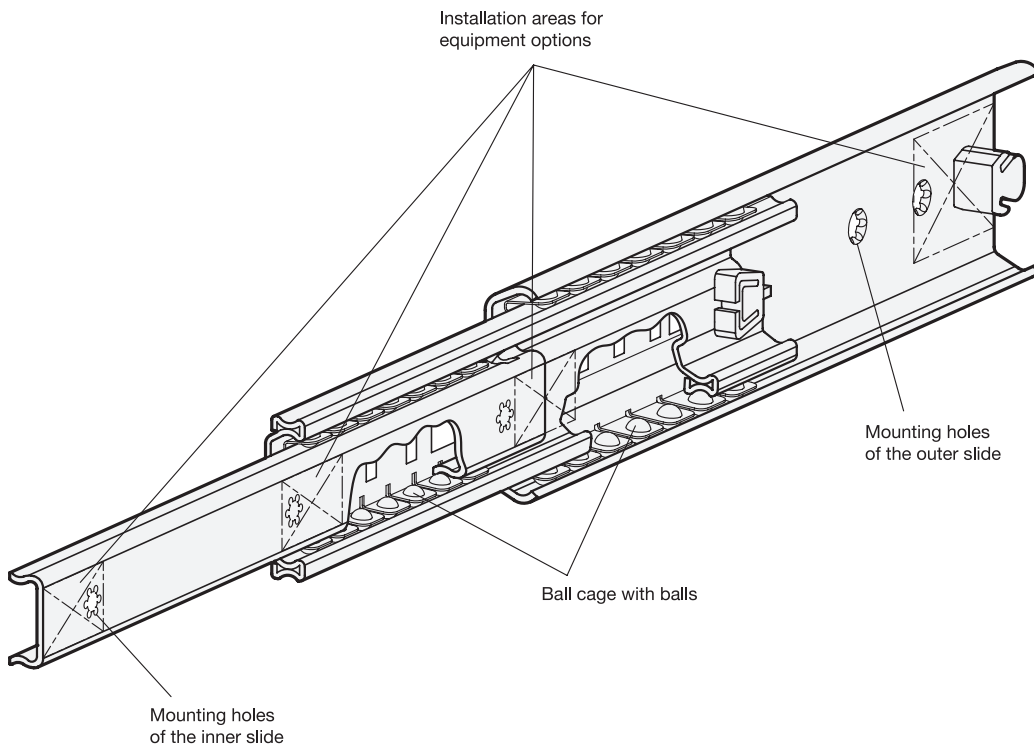
Telescopic Slides

General Information

Telescopic slides with full extension, retracted end position



Telescopic slides with full extension, extended end position



Telescopic Slides

Overview of Types



Series	Type of extension		Load capacity per pair at 10,000 cycles	Basic length Retracted position	Material Steel ST Stainless steel NI	Mounting		
	Partial extension T	Full extension V				Through holes (Identification no. 1)	Countersunk holes (Identification no. 2)	Outer slide - through holes / Inner slide - countersunk holes (Identification no. 3)
GN 1400 Page 1858	T		280 N <i>62 lbf</i>	300 - 500 mm <i>11.81 - 19.69 in</i>	ST	×		
GN 1404 Page 1860	T		780 N <i>175 lbf</i>	300 - 700 mm <i>11.81 - 27.56 in</i>	ST			×
GN 1408 Page 1862		V	250 N <i>56 lbf</i>	250 - 700 mm <i>9.84 - 27.56 in</i>	ST	×		
GN 1410 Page 1865		V	510 N <i>115 lbf</i>	250 - 800 mm <i>9.84 - 31.50 in</i>	ST	×		
GN 1412 Page 1868		V	430 N <i>96 lbf</i>	300 - 700 mm <i>11.81 - 27.56 in</i>	ST	×		
GN 1414 Page 1871		V	360 N <i>80 lbf</i>	300 - 650 mm <i>11.81 - 25.59 in</i>	ST	×		
GN 1418 Page 1874		V	430 N <i>96 lbf</i>	350 - 650 mm <i>13.78 - 25.59 in</i>	ST	×		
GN 1420 Page 1877		V	1290 N <i>290 lbf</i>	300 - 1200 mm <i>11.81 - 47.24 in</i>	ST		×	
GN 1422 Page 1879		V	1290 N <i>290 lbf</i>	300 - 800 mm <i>11.81 - 31.50 in</i>	ST		×	
GN 1424 Page 1882		V	750 N <i>169 lbf</i>	350 - 700 mm <i>13.78 - 27.56 in</i>	ST		×	
GN 1426 Page 1885		V	1380 N <i>310 lbf</i>	500 - 800 mm <i>19.69 - 31.50 in</i>	ST		×	
GN 1430 Page 1887		V	2120 N <i>477 lbf</i>	400 - 1200 mm <i>15.75 - 47.24 in</i>	ST		×	
GN 1432 Page 1889		V	2300 N <i>517 lbf</i>	400 - 800 mm <i>15.75 - 31.50 in</i>	ST		×	
GN 1440 Type B Page 1892		V	3250 N <i>731 lbf</i>	300 - 1500 mm <i>11.81 - 59.05 in</i>	ST	×		
GN 1440 Type M Page 1892		V	3250 N <i>731 lbf</i>	300 - 1500 mm <i>11.81 - 59.05 in</i>	ST	×		
GN 1440 Type K Page 1892		V	3250 N <i>731 lbf</i>	300 - 1500 mm <i>11.81 - 59.05 in</i>	ST	×		
GN 1440 Type Q Page 1892		V	3250 N <i>731 lbf</i>	300 - 1500 mm <i>11.81 - 59.05 in</i>	ST	×		
GN 1450 Page 1895		V	480 N <i>108 lbf</i>	300 - 600 mm <i>11.81 - 23.62 in</i>	NI	×		

Telescopic Slides

Equipment Features



Series	Equipment features									
	Without rubber stop	With rubber stop in retracted + extended position	Locking device in retracted position Type E	Locking device in retracted position, detach function Type F	Latch in retracted position Type M	Latch in extended position Type K	Latch in retracted + extended position Type Q	Self-retracting mechanism, dampened / not dampened	Push to open mechanism	Extension on both sides
GN 1400 Page 1858	×									
GN 1404 Page 1860		×	×							
GN 1408 Page 1862		×		×						
GN 1410 Page 1865		×		×						
GN 1412 Page 1868		×		×				×		
GN 1414 Page 1871				×				×		
GN 1418 Page 1874		×		×					×	
GN 1420 Page 1877		×	×							
GN 1422 Page 1879		×						×		
GN 1424 Page 1882		×						×		
GN 1426 Page 1885		×								×
GN 1430 Page 1887		×	×							
GN 1432 Page 1889		×						×		
GN 1440 Type B Page 1892		×								
GN 1440 Type M Page 1892		×			×					
GN 1440 Type K Page 1892		×				×				
GN 1440 Type Q Page 1892		×					×			
GN 1450 Page 1895		×		×						

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