

**2 Type**

**F** With rubber stop, locking device in retracted position, detach function

**3 Identification no.**

**1** Mounting with through-holes

**1**

$l_1$	$l_2$ <sup>+3</sup> <sub>-3</sub> Stroke	$l_3$	$F_S$ per pair in N	
			at 10,000 cycles	at 100,000 cycles
300	250	550	260	140
350	320	670	260	140
400	375	775	310	190
450	450	900	360	240

**1**

$l_1$	$l_2$ <sup>+3</sup> <sub>-3</sub> Stroke	$l_3$	$F_S$ per pair in N	
			at 10,000 cycles	at 100,000 cycles
500	500	1000	360	240
550	550	1100	310	190
600	600	1200	310	190
650	650	1300	260	140

**Specification**

- Slide profile  
Steel, zinc plated, blue passivated **ZB**
- Bearings  
Roller bearing steel, hardened
- Ball cage, outer slide  
Plastic
- Ball cage, inner slide  
Steel, zinc plated
- Rubber stop and detach function  
Plastic / Elastomer
- Self-retracting mechanism, dampened  
Steel / Plastic
- Operating temperature -20 °C to 100 °C
- RoHS

**On request**

- Other lengths and hole spacing
- Other attachment options
- Other surfaces

**Information**

Telescopic slides GN 1414 are installed vertically and in pairs. The stroke reaches  $\approx 100\%$  of the nominal length  $l_1$  (full extension). The rubber stops of type F dampen the impact of the slide in the end positions. This feature minimizes noise development and increases the lifespan. If larger static or dynamic loads occur in the direction of extension, they should be absorbed by external stop elements.

The telescopic slides are delivered in **pairs**. They can be installed on the extension on either the left or right side due to the mechanics. All mounting holes are easy to reach through auxiliary holes. Only the mounting holes are shown, but other production-related holes may be present.

see also...

- Technical Information on Telescopic Slides  $\rightarrow$  Page 1898 ff.
- Telescopic Slides GN 1424 (with Dampened Self-Retracting Mechanism)  $\rightarrow$  Page 1878
- Telescopic Slides GN 1410 (with Full Extension)  $\rightarrow$  Page 1861

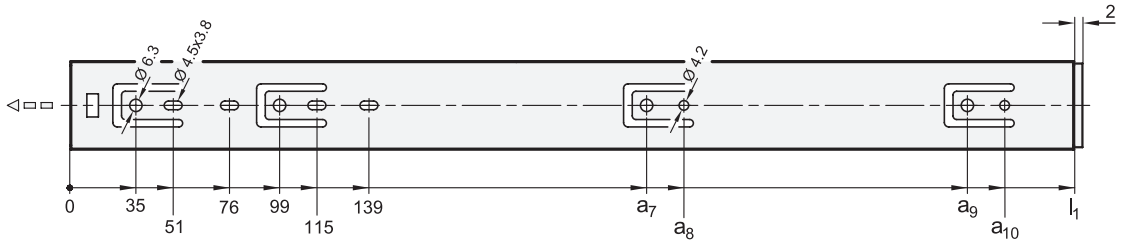
**How to order**

**GN 1414-650-B-1-ZB**

<b>1</b>	$l_1$
<b>2</b>	Type
<b>3</b>	Identification no.
<b>4</b>	Finish

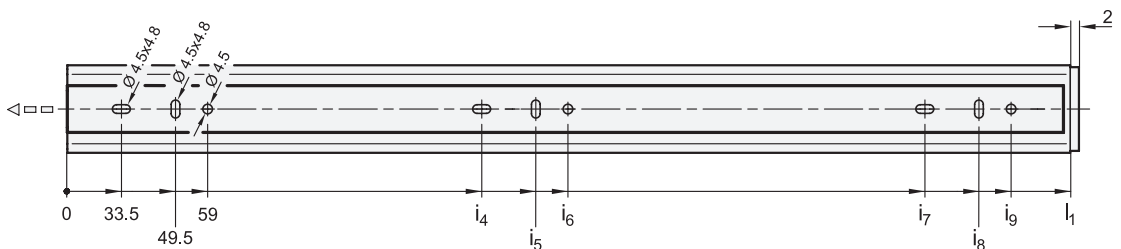


## Mounting holes - outer slide



$l_1$	$a_7$	$a_8$	$a_9$	$a_{10}$
300	191,75	207,75	-	-
350	241,75	257,75	-	-
400	291,75	307,75	-	-
450	195	211	341,75	357,75
500	227	243	391,75	407,75
550	259	275	441,75	457,75
600	291	307	491,75	507,75
650	323	339	541,75	557,75

## Mounting holes - inner slide



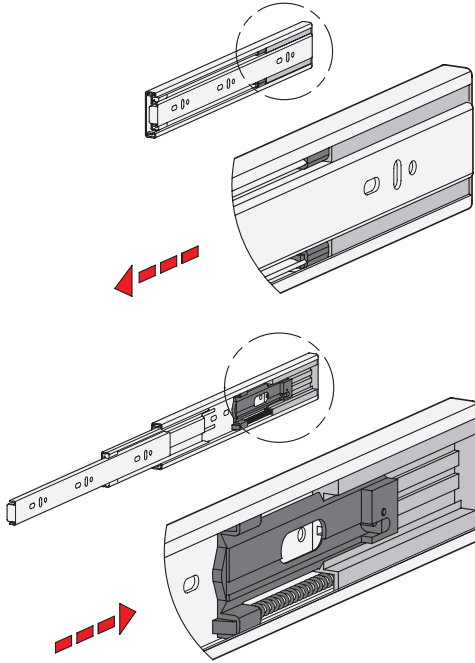
$l_1$	$i_4$	$i_5$	$i_6$	$i_7$	$i_8$	$i_9$
300	129,5	145,5	-	225,5	241,5	251
350	129,5	145,5	155	289,5	305,5	315
400	161,5	177,5	187	321,5	337,5	347
450	193,5	209,5	219	385,5	401,5	411
500	225,5	241,5	251	449,5	465,5	475
550	225,5	241,5	251	481,5	497,5	507
600	257,5	273,5	283	513,5	529,5	539
650	289,5	305,5	315	577,5	593,5	603

## Mounting screws

For the said loading forces  $F_S$  to be absorbed reliably in the surrounding structure, all available through-holes of the outer and inner slide having a diameter ( $\varnothing$ ) of 4.5 must be used. Alternatively, the outer slide has holes with a diameter ( $\varnothing$ ) of 6.3 for Euro screws. The elongated holes,  $\varnothing 4.5 \times 4.8$ , are used likewise for mounting and facilitate adjustment during mounting when needed. Failure to use mounting screws reduces the specified load capacity accordingly. The following screws can be used for mounting:

Designation - standard		Outer slide	Inner slide
Hexagon socket button head screw	ISO 7380	M 4	M 4
Pan head screw, Phillips	ISO 7045	M 4	M 4
Pan head tapping screw, Phillips	ISO 7049	ST 3,9 / 4,2	ST 3,9 / 4,2

### Self-retracting mechanism, dampened



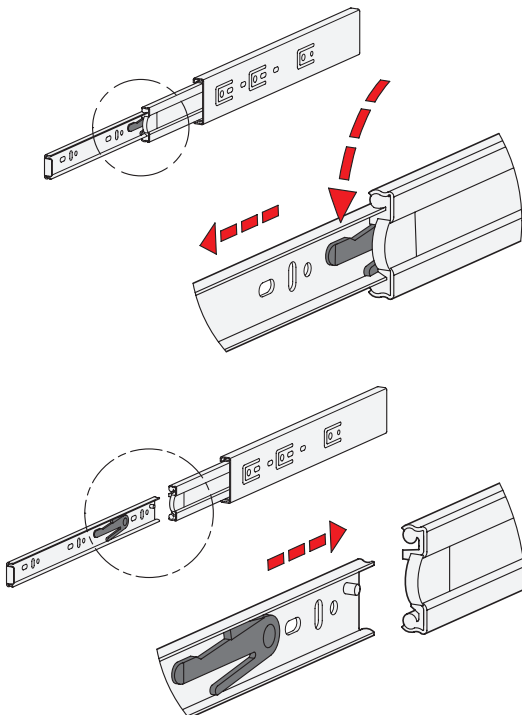
Telescopic slides GN 1414 have a dampened self-retracting mechanism, which is also called “soft-close”. The dampened self-retracting mechanism is divided into two main functions and offers the best possible ease of use on closing the extension.

The self-retracting mechanism takes over the automatic retraction of the slides on the last 47 mm of stroke in the back stop position, where the slides are held in place accordingly. The retraction force is about 40 newtons per slide pair. Also, the dampening mechanism slows down to a considerably reduced speed the closing movement on the said stroke. An extremely smooth and gentle closing movement is achieved. This retraction force has to be overcome accordingly on opening the extension.

The dampened self-retracting mechanism is designed for loads weighing up to 36 kg based on 60,000 cycles (LGA standard). Proper use, including the reduction of the stroke speed to no more than 0.15 m/s on reaching the retraction mechanism, as well as compliance with the load values are required.

In this slide variant the available retraction force can be regarded as a locking device, which is noticeable through a slight restriction on opening the extension.

### Detach function



Type F has additionally a detach function through which the extension slides can be completely separated from one another in the area of the middle and inner slide. This feature not only facilitates mounting. It also allows the extension to be quickly removed, for example, when frequent maintenance work is performed on the components located behind.

The telescopic slide can be quickly and easily detached in the extracted position through activation of the release lever, allowing the inner slide to be removed from the front.

For reattaching the slides, the ball cages need to be moved to the front end position. Then the inner slide is inserted to the back end stop where it locks into place automatically.

The protected arrangement of the release mechanism prevents accidental detachment of the slide.

3.1  
3.2  
3.3  
3.4  
3.5  
3.6  
3.7  
3.8  
3.9

