

2 Type

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

3 Identification no.

1 Mounting with through holes

Metric table

l ₁	l ₂ ⁺³ Stroke	l ₃	F _s per pair	
			at 10,000 cycles	at 100,000 cycles
300 11.81	250 9.84	550 21.65	260 N 58.45 lbf	140 N 31.47 lbf
350 13.78	320 12.60	670 26.38	260 N 58.45 lbf	140 N 31.47 lbf
400 15.75	375 14.76	775 30.51	310 N 69.69 lbf	190 N 42.71 lbf
450 17.72	450 17.72	900 35.43	360 N 80.93 lbf	240 N 53.95 lbf

Dimensions in: millimeters - inches

l ₁	l ₂ ⁺³ Stroke	l ₃	F _s per pair	
			at 10,000 cycles	at 100,000 cycles
500 19.69	500 19.69	1000 39.37	360 N 80.93 lbf	240 N 53.95 lbf
550 21.65	550 21.65	1100 43.31	310 N 69.69 lbf	190 N 42.71 lbf
600 23.62	600 23.62	1200 47.24	310 N 69.69 lbf	190 N 42.71 lbf
650 25.59	650 25.59	1300 51.18	260 N 58.45 lbf	140 N 31.47 lbf

Specification

- Slide profile
Steel, zinc plated, blue passivated finish **ZB**
- Balls
Rolling 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 -4 °F to +212 °F
(-20 °C to +100 °C)
- RoHS compliant

Information

GN 1414 telescopic slides are installed in pairs. The stroke reaches ≈ 100 % of the nominal length l₁ (full extension). The rubber stops dampen the impact of the slide in the end position. This feature minimizes noise development and increases the service life. If larger static or dynamic loads occur in the direction of extension, they should be absorbed by additional end stops.

The telescopic slides are delivered in **pairs**. They can be installed on either the left or right side due to the design. 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...

- List of Telescopic Slide Types → page 1856
- Technical Information on Telescopic Slides → page 1901
- Telescopic Slides GN 1424 (with Dampened Self-Retracting Mechanism) → page 1882
- Telescopic Slides GN 1410 (with Full Extension) → page 1865

On request

- Other lengths and hole distances
- Other mounting options
- Other finishes

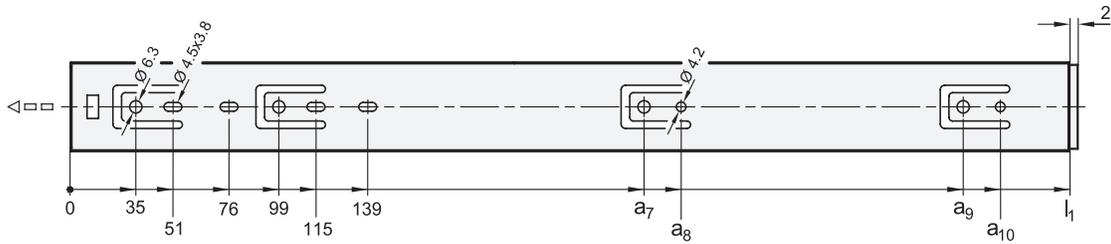
How to order	
1	Length l ₁
2	Type
3	Identification no.
4	Finish

GN 1414-650-F-1-ZB

3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
3.10



Mounting holes - Outer slide



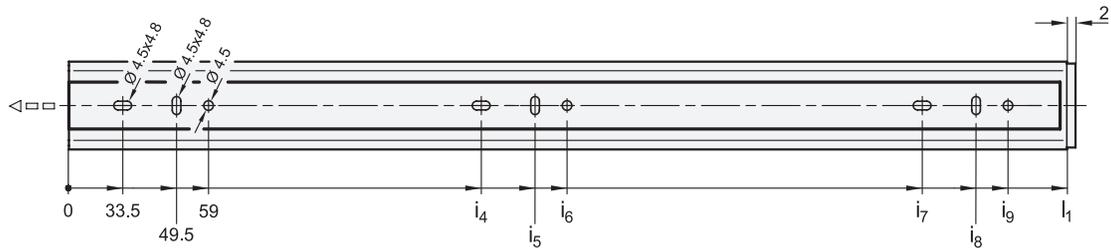
Metric table



Dimensions in: millimeters - inches

l_1	a_7	a_8	a_9	a_{10}
300 11.81	191.75 7.55	207.75 8.18	-	-
350 13.78	241.75 9.52	257.75 10.15	-	-
400 15.75	291.75 11.49	307.75 12.12	-	-
450 17.72	195 7.68	211 8.31	341.75 13.45	357.75 14.08
500 19.69	227 8.94	243 9.57	391.75 15.42	407.75 16.05
550 21.65	259 10.20	275 10.83	441.75 17.39	457.75 18.02
600 23.62	291 11.46	307 12.09	491.75 19.36	507.75 19.99
650 25.59	323 12.72	339 13.35	541.75 21.33	557.75 21.96

Mounting holes - Inner slide



Metric table



Dimensions in: millimeters - inches

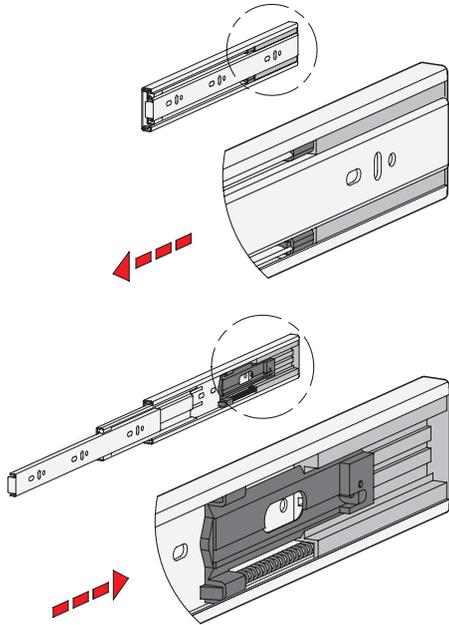
l_1	i_4	i_5	i_6	i_7	i_8	i_9
300 11.81	129.5 5.10	145.5 5.73	-	225.5 8.88	241.5 9.51	251 9.88
350 13.78	129.5 5.10	145.5 5.73	155 6.10	289.5 11.40	305.5 12.03	315 12.40
400 15.75	161.5 6.36	177.5 6.99	187 7.36	321.5 12.66	337.5 13.29	347 13.66
450 17.72	193.5 7.62	209.5 8.25	219 8.62	385.5 15.18	401.5 15.81	411 16.18
500 19.69	225.5 8.88	241.5 9.51	251 9.88	449.5 17.70	465.5 18.33	475 18.70
550 21.65	225.5 8.88	241.5 9.51	251 9.88	481.5 18.96	497.5 19.59	507 19.96
600 23.62	257.5 10.14	273.5 10.77	283 11.14	513.5 20.22	529.5 20.85	539 21.22
650 25.59	289.5 11.40	305.5 12.03	315 12.40	577.5 22.74	593.5 23.37	603 23.74

Mounting screws

For the listed loading forces F_S to be absorbed reliably in the surrounding structure, all available through holes of the outer and inner slide having a \varnothing of 4.5 mm must be used. Alternatively, the outer slide has holes with a \varnothing of 6.3 mm for metric screws. The slotted holes, \varnothing 4.5 x 4.8 mm, are also used for mounting and facilitate adjustment. 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
Socket button head screw	ISO 7380	M 4	M 4
Phillips pan head screw	ISO 7045	M 4	M 4
Phillips pan head self-tapping screw	ISO 7049	ST 3.9 / 4.2	ST 3.9 / 4.2

Self-retracting mechanism, damped



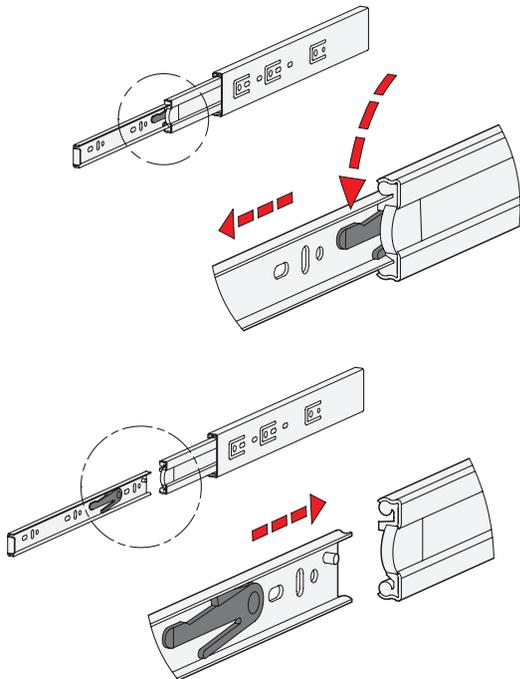
GN 1414 telescopic slides have a damped self-retracting mechanism, which is also called “soft-close”. The damped self-retracting mechanism is divided into two main functions and provides the best possible ease of use when closing an extension.

On the one hand, the self-retracting mechanism automatically retracts the slides on the last 47 mm of stroke to the retracted end position, where they are held in place accordingly. The retraction force is about 40 newtons per slide pair. On the other hand, the closing movement on the mentioned stroke is slowed down by the damping mechanism and thus reduces the speed considerably. An extremely smooth and gentle closing movement is achieved. This retraction force has to be overcome accordingly when opening the extension.

The damped self-retracting mechanism is designed for load values up to 36 kg based on 60,000 cycles (LGA standard). Proper use, such as reducing the travel speed to max 0.15 m/s when the retraction mechanism is reached, as well as compliance with the load values are required.

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

Detach function



The detach function allows the extension to 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 extended position through activation of the release lever, allowing the inner slide to be removed from the front.

For re-attaching the slides, the ball cages need to be moved to the extended end position. Then the inner slide is inserted to the retracted end position where it locks into place automatically.

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